DJ-V17 T/E/TFH/R
DJ-V47 T/E/T1/T2
Service Manual

CONTENTS

ALINCO, INC.

SPECIFICATIONS (DJ-V17)

General

Frequency range:	T:	TX144~147.995MHz	*144~147.995MHz
		RX130~173.995MHz	*144~147.995MHz
	E/EUK:	TX144~145.995MHz	*144~145.995MHz
		RX144~145.995MHz	*144~145.995MHz
	TFH/R:	TX136~173.995MHz	*150~173.995MHz
		RX130~173.995MHz	*150~173.995MHz

* Guaranteed range

Modulation:	F3E (FM)
Frequency step:	5, 10, 12.5, 15, 20, 25, 30kHz step
Memory channel:	200 channels + 1 call channel + 1 Repeater-Access function memory
Ant. impedance:	50 Ω unbalanced
Frequency stability:	±5ppm
Mic impedance:	2k Ω
Supply voltage:	DC 7.0~16.0V (EXT DC-IN)
Current consumption:	1.4A (typical) Transmit high at 5W 250mA (typical) Receive at 500mW 70mA (typical) Standby 25mA (typical) Battery save on
Temperature range:	External DC: -10ºC~+60ºC (+14ºF~+140ºF) Battery packs: -10ºC~+45ºC (+14ºF~+113ºF)
Ground:	Negative ground
Dimension:	58(W) x 110(H) x 36.4(D)mm (2.28"(W) x 4.33"(H) x 1.43"(D)) (with EBP-65)
Weight:	Approx. 280g (9.9oz) (with EBP-65)
DTMF:	16 Buttons Keypad
Sub audible Tone (CTCSS):	encoder/decoder installed (39 tones)
Sub audible Tone (CTS):	encoder/decoder installed (104codes)

Transmitter

Power output:	Approx. 5W (with EBP-65) Approx. 5W (with DC 13.8V) Approx. 0.8W (LOW output)
Modulation:	Variable reactance
Spurious emission:	-60dB or less
Max. deviation:	±5kHz
Mic. impedance:	2k Ω

Receiver

System:	Double-conversion super heterodyne
Sensitivity:	-14.0dB μ (0.2 μ V)or less
Intermediate frequency:	1st IF 21.7MHz 2nd IF 450kHz
Selectivity:	-6dB: 12kHz or more -60dB: 26kHz or less
AF output:	500mW (MAX) 400mW (8 Ω, 10% distortion)

SPECIFICATIONS (DJ-V47)

General

Frequency range:	T: TX420~449.995MHz	*420~449.995MHz
	RX400~479.995MHz	*420~449.995MHz
	E: TX430~439.995MHz	*430~439.995MHz
	RX430~439.995MHz	*430~439.995MHz
	T1: TX400~459.995MHz	*400~429.995MHz
	RX400~459.995MHz	*400~429.995MHz
	T2: TX440~479.995MHz	*450~469.995MHz
	RX440~479.995MHz	*450~469.995MHz

* Guaranteed range

Modulation:	F3E (FM)
Frequency step:	5, 10, 12.5, 15, 20, 25, 30kHz step
Memory channel:	200 channels + 1 call channel + 1 Repeater-Access function memory
Ant. impedance:	50 Ω unbalanced
Frequency stability:	±2.5ppm
Mic impedance:	2k Ω
Supply voltage:	DC 7.0~16.0V (EXT DC-IN)
Current consumption:	1.7A (typical) Transmit high at 5W
	250mA (typical) Receive at 500mW
	80mA (typical) Standby
	27mA (typical) Battery save on
Temperature range:	External DC: -10ºC~+60ºC (+14ºF~+140ºF)
	Battery packs: -10ºC~+45ºC (+14ºF~+113ºF)
Ground:	Negative ground
Dimension:	58(W) x 110(H) x 36.4(D)mm
	(2.28"(W) x 4.33"(H) x 1.43"(D))
	(with EBP-65)
Weight:	Approx. 280g (9.9oz)
	(with EBP-65)
DTMF:	16 Buttons Keypad
Sub audible Tone (CTCSS):	encoder/decoder installed (39 tones)
Sub audible Tone (CTS):	encoder/decoder installed (104codes)

Transmitter

Power output:	Approx. 4.5W (with EBP-65)
	Approx. 5W (with DC 13.8V)
	Approx. 0.8W (LOW output)
Modulation:	Variable reactance
Spurious emission:	-60dB or less
Max deviation:	±5kHz
Mic. impedance:	2k Ω

Receiver

System:	Double-conversion super heterodyne
Sensitivity:	-12.0dB μ(0.25 μV)or less
Intermediate frequency:	1st IF 38.85MHz 2nd IF 450kHz
Selectivity:	-6dB: 12kHz or more
	-60dB: 26kHz or less
AF output:	500mW (MAX)
	400mW (8 Ω, 10% distortion)

CIRCUIT DESCRIPTION

1) Receiver System

DJ-V17 :The receiver system is a double superheterodyne system with a 21.7 MHz first IF and a 450 kHz second IF.

DJ-V47 :The receiver system is a double superheterodyne system with a 38.85 MHz first IF and a 450 kHz second IF.

1. Front End

DJ-V17 :The received signal at any frequency in the 130.000- to 173.995-MHz (E version : 144.000- to 145.995-MHz) range is passed through the low-pass filter (L101, L102, L103, L113, C108, C120, C121, C124, C125, C126, C127 and C176) and ATT (Attenuator) circuit (Q120, R161, R187 and D112), and tuning circuit (C192, C193, C215, C216, D115, D116, L125 and L126), then amplified by the RF amplifier (Q114). The signal from Q114 is then passed through the tuning circuit (C200, C201, C219, C220, D117, D118, L128 and L129) and converted into 21.7 MHz by the mixer (Q116). The tuning circuit, which consists of C192, C193, C215, C216, L125, L126, variable capacitance diodes D115 and D116 and C200, C201, C219, C220, L128, L129, variable capacitance diodes D117 and D118, is controlled by the tracking voltage from the CPU so that it is optimized for the reception frequency. The local signal from the VCO is passed through the buffer (Q113), and supplied to the source of the mixer (Q116). The radio uses the lower side of the superheterodyne system.

DJ-V47 :The received signal at any frequency in the covering range (T version : 400.000- to 479.995-MHz, E version : 430.000- to 439.995-MHz, T1 version : 400.000- to 459.995MHz, T2 version : 440.000- to 479.995MHz) is passed through the low-pass filter (L101, L102, L103, L113, C108, C120, C121, C124, C125, C126, C127 and C176) and ATT (Attenuator) circuit (Q120, R161, R187 and D112), and tuning circuit (C192, C193, C215, C216, D115, D116, L125 and L126), then amplified by the RF amplifier (Q114). The signal from Q114 is then passed through the tuning circuit (C200, C201, C219, C220, D117, D118, L128 and L129) and converted into 38.85 MHz by the mixer (Q116). The tuning circuit, which consists of C192, C193, C215, C216, L125, L126, variable capacitance diodes D115 and D116 and C200, C201, C219, C220, L128, L129, variable capacitance diodes D117 and D118, is controlled by the tracking voltage from the CPU so that it is optimized for the reception frequency. The local signal from the VCO is passed through the buffer (Q113), and supplied to the source of the mixer (Q116). The T1/T2 versions use the lower side of the superheterodyne system while T/E versions switshes the lower and upper system at 420.000MHz; the lower side foe the frequency up to 419.995MHz and upper side for 420.000MHz and up.

2. ATT (Attenuator) Circuit

This circuit is used in case the receiving signal is disturbed by interfering signal(s), attenuating the receiving signal(s) to reduce the interference. CPU (IC109)'s pin 10 outputs a DC current to drive Q120, controlling D112's resistance to adjust the attenuation value.

3. IF Circuit

DJ-V17 :The mixer(Q116) mixes the received signal with the local signal to obtain the sum of and difference between them. The crystal filter (FL101 , FL102) selects 21.7 MHz frequency from the results and eliminates the signals of the unwanted frequencies. The first IF amplifier (Q119) then amplifies the signal of the selected frequency. After the signal is amplified by the first IF amplifier (Q119), it is input to pin 16 of the demodulator IC (IC103). The second local signal of 21.25 MHz (shared with PLL IC reference oscillation), which is oscillated by the internal oscillation circuit in IC103 and crystal (X101), is input through pin 1 of IC103. Then these two signals are mixed by the internal mixer in IC103 and the result is converted into the second IF signal with a frequency of 450kHz. The second IF signal is output from pin 3 of IC103 tothe ceramic filter (FL103), where the unwanted frequency band of that signal is eliminated, and the resulting signal is sent back to the IC103 through 5 pins.

DJ-V47 :The mixer(Q116) mixes the received signal with the local signal to obtain the sum of and difference between them. The crystal filter (FL101) selects 38.85 MHz frequency from the results and eliminates the signals of the unwanted frequencies. The first IF amplifier (Q119) then amplifies the signal of the selected frequency. After the signal is amplified by the first IF amplifier (Q119), it is input to pin 16 of the demodulator IC (IC103). The second local signal of 38.4 MHz, which is oscillated by the internal oscillation circuit in IC103 and output of tripler circuit (L123, C202, C191, L122, Q115), is input through pin 1 of IC103. Then these two signals are mixed by the internal mixer in IC103 and the result is converted into the second IF signal with a frequency of 450kHz. The second IF signal is output from pin 3 of IC103 tothe ceramic filter (FL103), where the unwanted frequency band of that signal is eliminated, and the resulting signal is sent back to the IC103 through 5 pins.

4. Demodulator Circuit

The second IF signal input via pin 5 is demodulated by the internal limiter amplifier and Quadrature detection circuit in IC103, and output as an audio signal through pin 9.

5. Audio Circuit

The audio signal from pin 9 of IC103 is compensated to the audio frequency characteristics in the de-emphasis circuit (R223, R224, C241, C242) and amplified by the AF amplifier (Q196). The signal is then input to pin 1 of the electronic volume (IC107) for volume adjustment, and output from pin 2. The adjusted signal is sent to the audio power amplifier (IC106) through pin 2 to drive the speaker.

6. Squelch Circuit

Part of the audio signal from pin 9 of IC103 is amplified by the noise filter amplifier and the internal noise amplifier in IC103. The desired noise of the signal is output through pin 14 of IC103 and input to pin 2 of CPU (IC109).

2) Transmitter System

1. Modulator Circuit

The audio signal is converted to an electric signal in either the internal or external microphone, and input to the microphone amplifier (IC102).
IC102 consists of four operational amplifiers; 1st amplifier (pins 1, 2, and 3) is composed of high-pass filter, 2nd amplifier (pins 12, 13, and 14) is composed of pre-emphasis and IDC circuits, 3rd amplifier (pins 8, 9, and 10) is composed of a splatter filter and 4th amplifier (pins 7, 6, and 5) is composed of a splatter filter. The maximum frequency deviation is determined to its optimal value by VR104 and input to the cathode of the variable capacitance diode of the VCO, to change the electric capacity in the oscillation circuit.

2. Power Amplifier Circuit

The transmitted signal is oscillated by the VCO, amplified by the pre-drive amplifier (Q104) and drive amplifier (Q103), and input to the power amplifier (Q102). The signal is then amplified by the power amplifier (Q102) and led to the antenna switch (D101 and D103) and low-pass filter (L104, L103, L102, L101, C107, C108, C109, C110, C111, C120, C121, C124, C125, C126, and C127), where unwanted high harmonic signals are reduced as needed, and the resulting signal is supplied to the antenna.

3. APC Circuit

Part of the transmission power from the low-pass filter is detected by D105, converted to DC, and then amplified by a differential amplifier (Q111). The output voltage controls the bias voltage from the gate of Q102 and Q103 to maintain the transmission power constant.

3) PLL Synthesizer Circuit

1.CPU control

The dividing ratio is obtained by sending data from the CPU (IC109) to pin 10, and sending clock pulses to pin 9 of the PLL IC (IC101). The oscillated signal from the VCO is amplified by the buffer (Q118), then input to pin 8 of IC101. Each programmable divider in IC101 divides the frequency of the input signal by N-value according to the frequency data, to generate a comparison frequency of 5 or 6.25 kHz.

2. Reference Frequency Circuit

DJ-V17 :The reference frequency appropriate for the channel steps is obtained by dividing the 21.25MHz reference oscillation (X101) by 4250 or 3400, according to the data from the CPU (IC109). When the resulting frequency is 5 kHz, channel steps of 5, 10, 15, 20, and 30 kHz are used. When it is 6.25 kHz, steps of 12.5, 25, and 50 kHz are used.

DJ-V47 :The reference frequency appropriate for the channel steps is obtained by dividing the 12.8MHz reference oscillation (X102) by 2048 or 2560, according to the data from the CPU (IC109). When the resulting frequency is 5 kHz, channel steps of 5, 10, 15, 20, and 30 kHz are used. When it is 6.25 kHz, steps of 12.5, 25, and 50 kHz are used.

3. Phase Comparator Circuit

The PLL (IC101) uses the reference frequency, 5 or 6.25 kHz. The phase comparator in the IC101 compares the phase of the frequency from the VCO with that of the comparison frequency, 5 or 6.25 kHz, which is obtained by the internal divider in IC101.

4. PLL Loop Fitter Circuit

If a phase difference is found in the phase comparison between the reference frequency and VCO output frequency, the charge pump output (pin 5) of IC101 generates a pulse signal, which is converted to DC voltage by the PLL loop filter and input to the variable capacitance diode of the VCO unit for oscillation frequency control.

5. VCO Circuit

DJ-V17 :A Colpitts oscillation circuit driven by Q108 directly oscillates the desired frequency. The frequency control voltage determined in the CPU (IC109) and PLL circuit is input to the variable capacitance diodes (D107 and D109). This changes the oscillation frequency, which is amplified by the VCO buffer (Q110) and output from the VCO unit.

DJ-V47 :A Colpitts oscillation circuit driven by Q108 directly oscillates the desired frequency. The frequency control voltage determined in the CPU (IC109) and PLL circuit is input to the variable capacitance diodes (D109 and D110). This changes the oscillation frequency, which is amplified by the VCO buffer (Q110) and output from the VCO unit.

4) CPU and Peripheral Circuits

1. LCD Display Circuit

The CPU turns ON the LCD via segment and common terminals with 1/3 the duty and 1/3
the bias, at the frame frequency of 112.5Hz.

2. Display Lamp Circuit

When the LAMP key is pressed, "L" is output from pin 42 of CPU (IC109) to the bases of Q152 then turns to ON and "H" is output from emitter of Q152 to the bases of Q146 to light LEDs (D131, D132).

3. Reset and Backup Circuits

TWhen the Output Voltage from pin 3 of IC110 drops to 4.5 V or below, the output signal from the reset IC (IC104), which has been input to pin 33 of the CPU (IC109), changes from "H" to "L" level. The CPU will then be in the backup state.

4. S(Signal)Meter Circuit

The DC potential of pin 12 of IC103 is input to pin 1 of the CPU (IC109), converted from an analog to a digital signal, and displayed as the S-meter signal on the LCD.

5. Tone Encoder

The CPU (IC109) is equipped with an internal tone encoder. The tone signal (67.0 to 250.3Hz) is output from pin 9 of the CPU to the variable capacitance diode of the VCO and 21.25MHz reference oscillation (X101) of the PLL IC (IC101) for modulation.

6. DCS Encoder

DJ-V17 :The CPU (IC109) is equipped with an internal DCS code encoder. The DCS code (023 to 754) is output from pin 7 of the CPU to 21.25 MHz reference oscillation (X101) of the PLL IC (IC101) for modulation.

DJ-V47 :The CPU (IC109) is equipped with an internal DCS code encoder. The DCS code (023 to 754) is output from pin 7 of the CPU to 12.8 MHz reference oscillation (X102) of the PLL IC (IC101) for modulation.

7. CTCSS, DCS Decoder

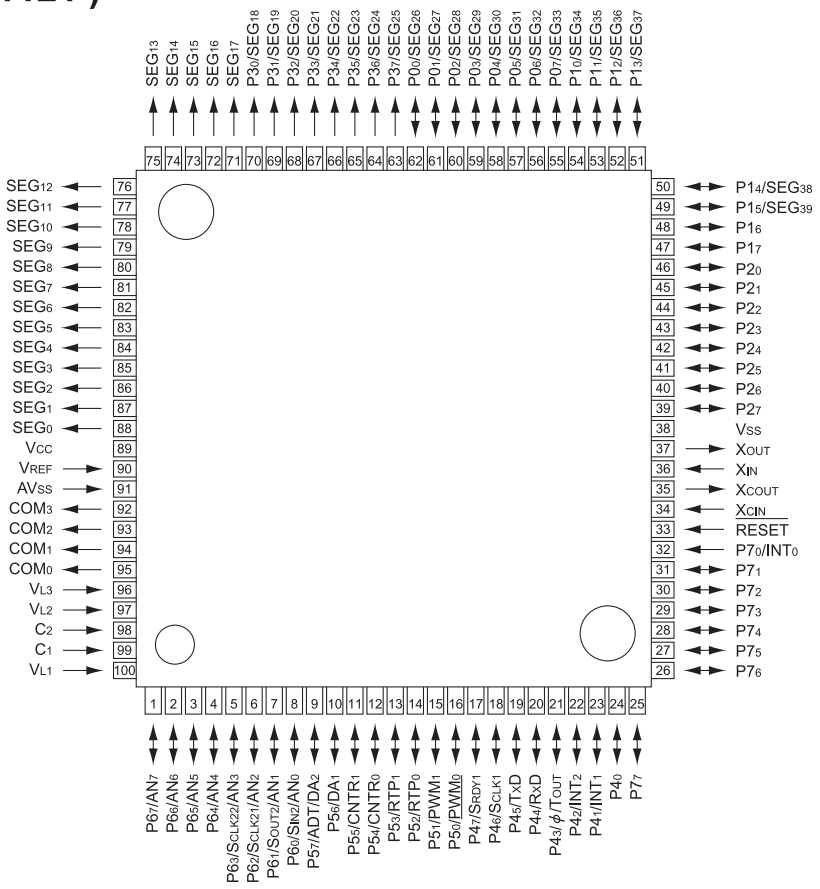
The AF signal from the pin 9 of IC103 is filtered by an active filter (IC108) to eliminate the voice range of the signal then amplified and input to the pin 4 of the CPU (IC109). The signal is compared in the CPU with the pre-selected CTCSS and DCS values and the squelch opens in case the value matches.

8.Clock Shift

In case the selected frequency is disturbed by a CPU clock-noise, it may be eliminated by changing the CPU clock frequency. When the clock-shift is set, the pin 31 of the CPU (IC109) becomes Low turning ON the Q124. When Q124 becomes ON, X104's oscillation frequency shifts approximately by 200ppm.

5) M38268MCA-077GP (XA1121)

CPU
Terminal Connection
(TOP VIEW)



No.	Terminal	Signal	I/O	Description
1	P67/AN7	SMT	I	S-meter input
2	P66/AN6	SQL	I	Noise level input for squelch
3	P65/AN5	BAT	I	Low battery detection input
4	P64/AN4	TIN	I	CTCSS tone input / DCS code input
5	P63/SCLK22/AN3	BP1	I	Band plan 1
6	P62/SCLK21/AN2	BP2	I	Band plan 2
7	P61/SOUT2/AN1	DCSW	O	DCS signal mute
8	P60/SIN2/AN0	FKEY	I	Function / Monitor Key input
9	P57/ADT/DA2	CTOUT	O	CTCSS tone output / DCS tone output
10	P56/DA1	DTOUT	O	DTMF output
11	P55/CNTR1	SCL	O	Serial clock for EEPROM
12	P54/CNTR0	TBST	I/ O	Tone burst output
13	P53/RTP1	BP4	I	Band plan 4
14	P52/RTP0	MUTE	I/ O	Microphone mute / Bank change input while trunking
15	P51/PWM3	CLK	O	Serial clock output for PLL, and trunking board
16	P50/PWM0	DATA	I/O	Serial data output for PLL, CTCSS / PLL unlock signal input / EVR control output
17	P47/SROY1	TRST	I/O	Trunking board detection (when the unit is turned ON) / Strobe signal to trunking board
18	P46/SCLK1	STBP	O	Strobe for PLL IC
19	P45/TXD	UTX	O	UART data transmission output
20	P44/RXD	URX	I	UART data reception input
21	P43/ΦTOUT	BEEP	I/ O	Beep tone/Band plan 3 (when the unit is turned on)
22	P42/INT2	RE2	I	Rotary encoder input
23	P41/INT1	RE1	I	
24	P40	CLO	O	CLONE ON/OFF output
25	P77	PTTK	I	PTT input
26	P76	CHG	I	Battery charge ON/OFF output
27	P75	P5C	O	PLL power ON/OFF output
28	P74	T5C	O	TX power ON/OFF output
29	P73	R5C	O	RX power ON/OFF output
30	P72	AFP	O	AF AMP power ON/OFF output
31	P71	CLSFT	O	CLOCK frequency shift
32	P70/INTO	BU	I	Backup signal detection input
33	RESET	RESET	I	Reset input
34	Xcin		-	-
35	Xcout		-	-
36	Xin	XIN	-	Main clock input
37	Xout	XOUT	-	Main clock output
38	Vss	GND	-	CPU GND
39	P27	PSW	I	Power switch input
40	P26	SDA	O	Serial data for EEPROM
41	P25	C5C	O	C5V power ON/OFF output
42	P24	LAMP	O	Lamp ON/OFF
43	P23	KI0	I	Key matrix input
44	P22	KI1	I	
45	P21	KI2	I	
46	P20	KI3	I	
47	P17	KO3	O	Key matrix output
48	P16	KO2	O	
49	P15/SEG39	KO1	O	
50	P14/SEG38	KO0	O	
51	P13/SEG37	DA3	O	DA converter for Tx output power
52	P12/SEG36	DA2	O	DA converter for Tx output power
53	P11/SEG35	DA1	O	DA converter for Tx output power
54	P10/SEG34	AFC/DA0	O	DA converter for Tx output power
55	P07/SEG33	EXP	I/O	Trunking TXDT control / Voice Scrambler Board detection (when the unit is turned on)
56	P06/SEG32	SD/PO	O	Signal detection output / Tx power Hight or Low

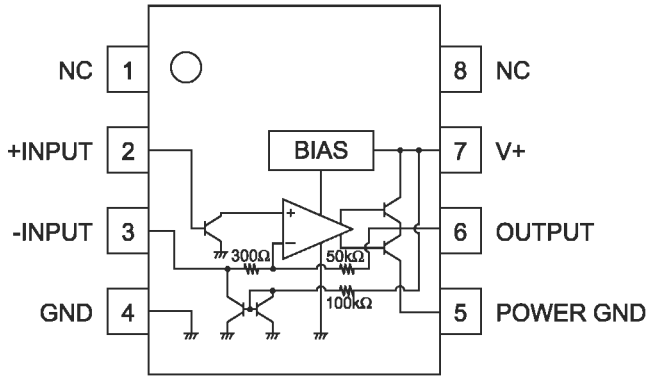
No.	Terminal	Signal	I/O	Description
57	P05/SEG31	SEG31	O	LCD segment signal
58	P04/SEG30	SEG30	O	
59	P03/SEG29	SEG29	O	
60	P02/SEG28	SEG28	O	
61	P01/SEG27	SEG27	O	
62	P00/SEG26	SEG26	O	
63	P37/SEG25	SEG25	O	
64	P36/SEG24	SEG24	O	
65	P35/SEG23	SEG23	O	
66	P34/SEG22	SEG22	O	
67	P33/SEG21	SEG21	O	
68	P32/SEG20	SEG20	O	
69	P31/SEG19	SEG19	O	
70	P30/SEG18	SEG18	O	
71	SEG17	SEG17	O	
72	SEG16	SEG16	O	
73	SEG15	SEG15	O	
74	SEG14	SEG14	O	
75	SEG13	SEG13	O	
76	SEG12	SEG12	O	
77	SEG11	SEG11	O	
78	SEG10	SEG10	O	
79	SEG9	SEG9	O	
80	SEG8	SEG8	O	
81	SEG7	SEG7	O	
82	SEG6	SEG6	O	
83	SEG5	SEG5	O	
84	SEG4	SEG4	O	
85	SEG3	SEG3	O	
86	SEG2	SEG2	O	
87	SEG1	SEG1	O	
88	SEG0	SEG0	O	
89	Vcc	VDD	-	CPU power terminal
90	Vref	Vref	-	AD converter power supply
91	Avss	Avss	-	AD converter GND
92	COM3	COM3	O	LCD COM3 output
93	COM2	COM2	O	LCD COM2 output
94	COM1	COM1	O	LCD COM1 output
95	COM0	COM0	O	LCD COM0 output
96	VL3	VL3	-	LCD power supply
97	VL2	VL2	-	
98	C2	C2	-	-
99	C1	C1	-	-
100	VL1	VL1	I	LCD power supply

SEMICONDUCTOR DATA

1) NMJ2070MT1 (XA0210)

Low Voltage Power Amplifier

Equivalent Circuit

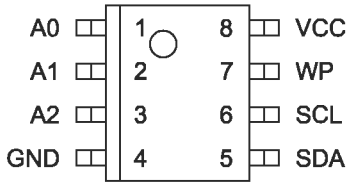


V+=6V, Ta=25±2°C

Parameter	Condition		Symbol	Min.	Typ.	Max.	Unit
Supply voltage			V+	1.8	-	15	V
Idle current	RL=		IQ	-	4	7	mA
Output voltage			Vo	-	2.7	-	V
Input bias current			IB	-	200	-	nA
Output power	THD=10%, f=1kHz	V+=6V, RL=4	Po	0.5	0.6	-	W
		V+=4.5V, RL=4		-	0.32	-	W
		V+=3V, RL=4		-	120	-	mW
		V+=2V, RL=4		-	30	-	mW
	THD=10%, f=1kHz	V+=6V, RL=4		-	500	-	mW
		V+=4.5V, RL=4		-	250	-	mW
Distortion	Po=0.4W, RL=4 ,	f=1kHz	THD	-	0.25	-	%
Voltage gain	f=1kHz		Av	41	44	47	dB
Input impedance	f=1kHz		ZIN	100	-	-	k
Equivalent input noise voltage	Rs=10k	A curve	Vn1	-	2.5	-	μV
		B=22Hz to 22kHz	Vn2	-	3	-	μV
Power supply voltage rejection ratio	f=100Hz, Cx=100 μF		SVR	24	30	-	dB
Power gain band width (–3dB)	RL=8 , Po=250mW		P.B	-	200	-	kHz

2) S24CS64A01-J8T1G (XA1117)

16K bits CMOS Serial EEPROM

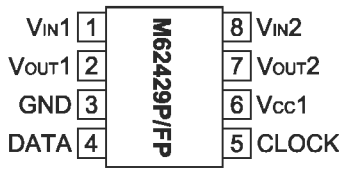


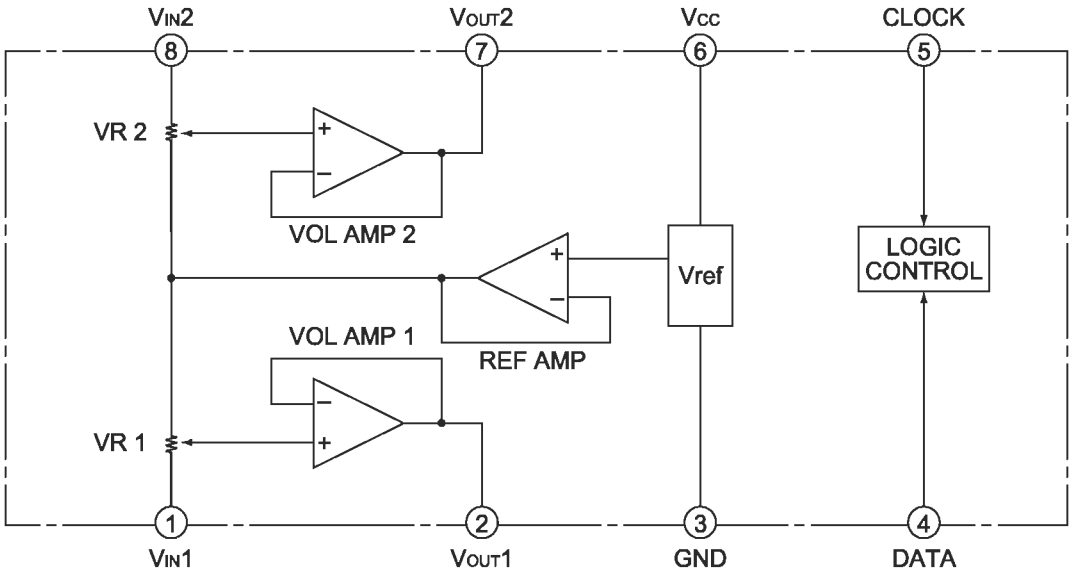
Pin Number	Pin Name	Function
1	A0	Slave address input
2	A1	Slave address input
3	A2	Slave address input
4	GND	Groudd
5	SDA	Serial data input / output
6	SCL	Serial clock input
7	WP	Write protection input Connected to Vcc: Protection valid Connected to GND: Protection invalid
8	VCC	Power supply

Remark See Dimensions for details of the package drawings.

3) M62429FP/CF0J (XA1118)

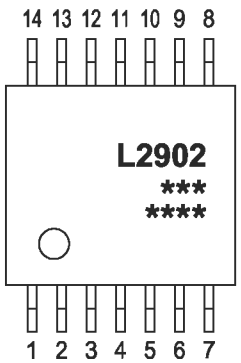
Electronic Volume





4) LM2902PWR (XA1106)

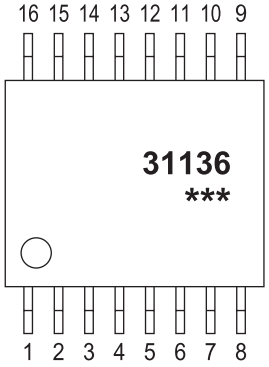
Quad Operational Amplifiers



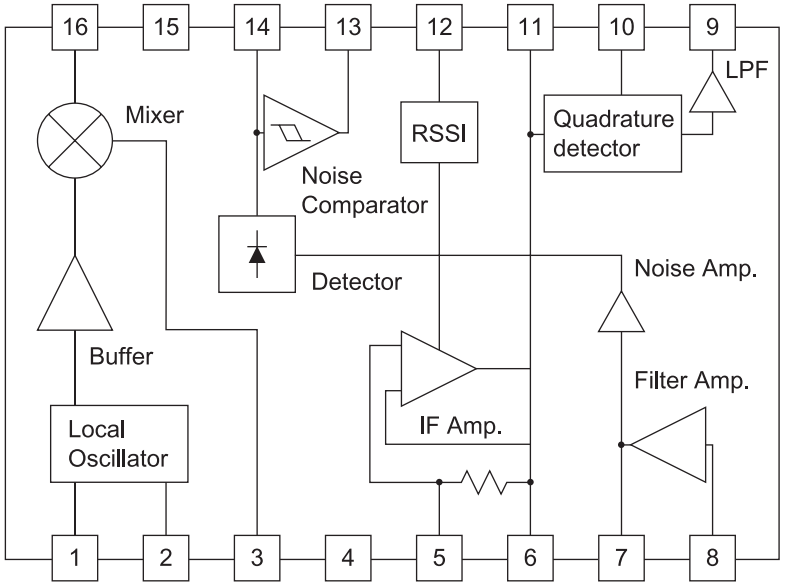
1. Output A
2. Inverting Input A
3. Non-inverting Input A
4. Vcc
5. Non-inverting Input B
5. Inverting Input B
7. Output B
8. Output C
9. Inverting Input C
10. Non-inverting Input C
11. GND
12. Non-inverting Input D
13. Inverting Input D
14. Output D

5) TA31136FN(EL) (XA0404)

Low Power FM IC

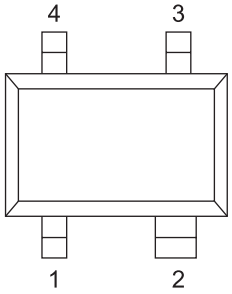


1. OSC IN	9. AF OUT
2. OSC OUT	10. QUAD
3. MIX OUT	11. IF OUT
4. Vcc	12. RSSI
5. IF IN	13. N-DET
6. DEC	14. N-REC
7. FIL OUT	15. GND
8. FIL IN	16. MIC IN



6) S80845CLNB-B66-T2G (XA1120)

C-MOS Voltage Detector

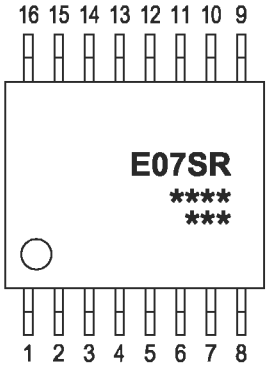


Pin No.	Pin name	Pin description
1	OUT	Voltage detection output pin
2	VDD	Voltage input pin
3	NC*1	No connection
4	VSS	GND pin

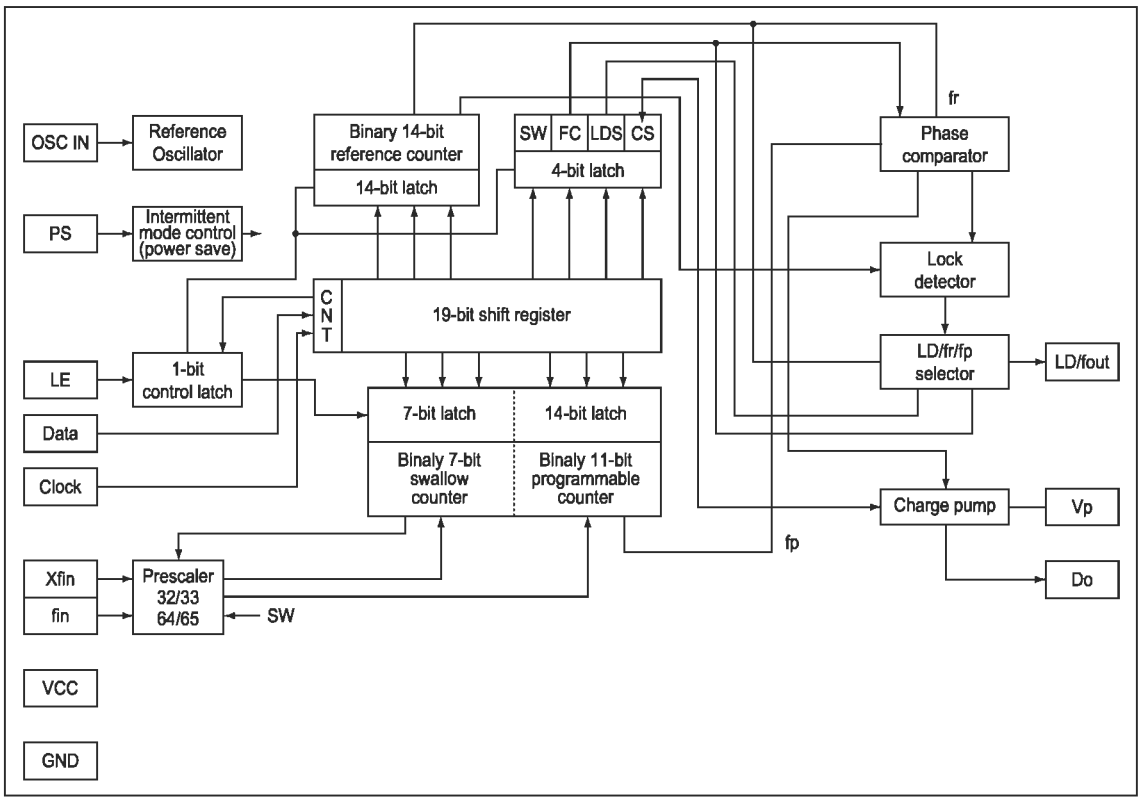
***1.** The NC pin is electrically open.
The NC pin can be connected to VDD or VSS.

7) MB15E07SR (XA1107)

PLL Synthesizer



1. OSC IN
2. N. C.
3. Vp
4. Vcc
5. Do
6. GND
7. Xfin
8. fin
9. CLOCK
10. Data
11. LE
12. PS
13. N. C.
14. LD / fout
15. N. C.
16. N. C.

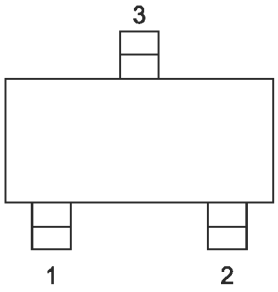


(Vcc=2.7 to 5.0V, Ta=-40ºC to +85oC)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Power supply voltage	Vcc	-	2.7	3.75	5.0	V
Power supply current	Icc	2500MHz Vcc=Vp=3.75V		8.0		mA
LPF supply voltage	Vp	-	Vcc	-	5.5	V
Local oscillator input level	Vfin	100MHz to 300MHz 300MHz to 2500MHz	-6 -15		+2 +2	dBm
Local oscillator input frequency	fin	-	100		2500	MHz
Xin input level	Vxin	-	0.5		Vcc	Vp-p
Xin input frequency	Fxin	-	3		40	MHz

8) XC6202P502MR (XA1119)

Voltage Regulator



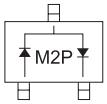
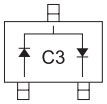
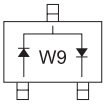
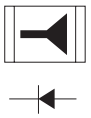
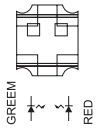
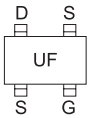
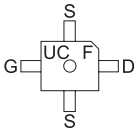
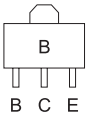
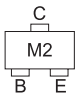
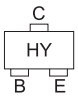
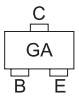
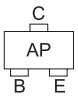
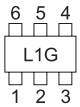
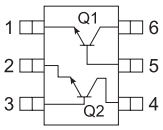
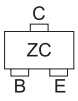
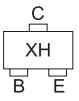
Pin No.	Pin name	Function
1	VOUT	Regulated Voltage Output
2	VIN	Supply Voltage Input
3	VSS	Ground

Absolute Maximum Ratings

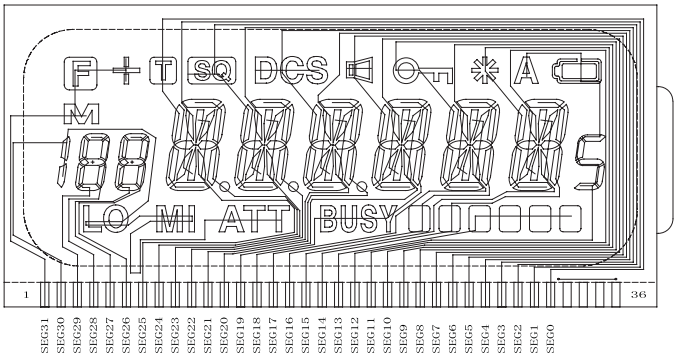
Parameter	Symbol	Rating	Units
Input Voltage	VIN	22	V
Output Current	IOUT	500	mA
Output Voltage	VOUT	VSS-0.3~VIN+0.3	V
Power Dissipation	Pd	150	mW
Operating Ambient Temperature	Topr	-40~+85	ºC
Storage Temperature	Tstg	-55~+125	ºC

9) Transistor, Diode and LED outline Drawings

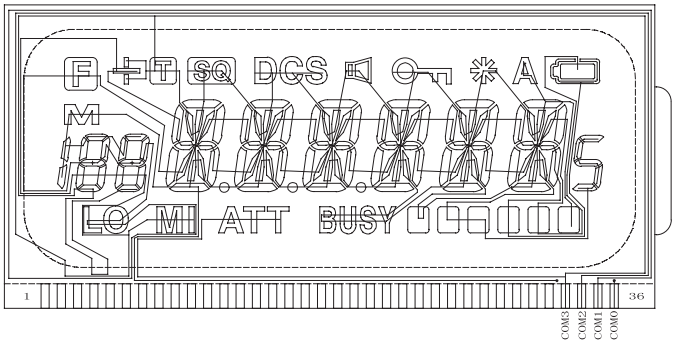
Top View

MA741WA-(TX)	1SS362(TE85L)	1SV308(TPH3)	MAZS0270HL	1SV314(TPH3,F)	1SS423(TE85L,F)	HVC202BTRU-E
XD0251	XD0338	XD0339	XD0377	XD0403	XD0416	XD0417
						
RB521S-30TE61	1SS400TE61	FA3J3STP	1SV323(TPH3,H)	HSC277TRF-E	HVC132TRF-E	S3JB-T
XD0418	XD0419	XD0420	XD0421	XD0422	XD0423	XD0424
						
SML-310MTT86	SML-521MUWT86	3SK293 TE85L	SSM3K15FV(TPL)	2SK3475(TE12L,F)	2SK3476(TE12L,Q)	2SB766A-(TX)R
XL0036	XL0097	XE0053	XE0069	XE0070	XE0071	XT0170
						
2SC5066FT-Y	2SC6026MFV	2SA1955FV-A(TPL3)	2SC5659T2L	HN2C01FE-GR(T5L,F)	15GN03F-TL-E	RN1107MFV(TPL3)
XT0180	XT0210	XT0212	XT0213	XT0214	XT0219	XU0210
				 		 Rb=10kohm Rbe=47kohm
RN2107MFV(TPL3)	RN2115MFV(TPL3)	RN1111MFV(TPL3),F	RN2111MFV(TPL3)			
XU0211	XU0212	XU0213	XU0220			
 Rb=10kohm Rbe=47kohm	 Rb=2.2kohm Rbe=10kohm	 Rb= min :7kohm typ. : 10kohm max :13kohm Rbe=none	 Rb=min:7kohm typ. : 10kohm max :13kohm Rbe=none			

10) LCD Connection (EL0059)



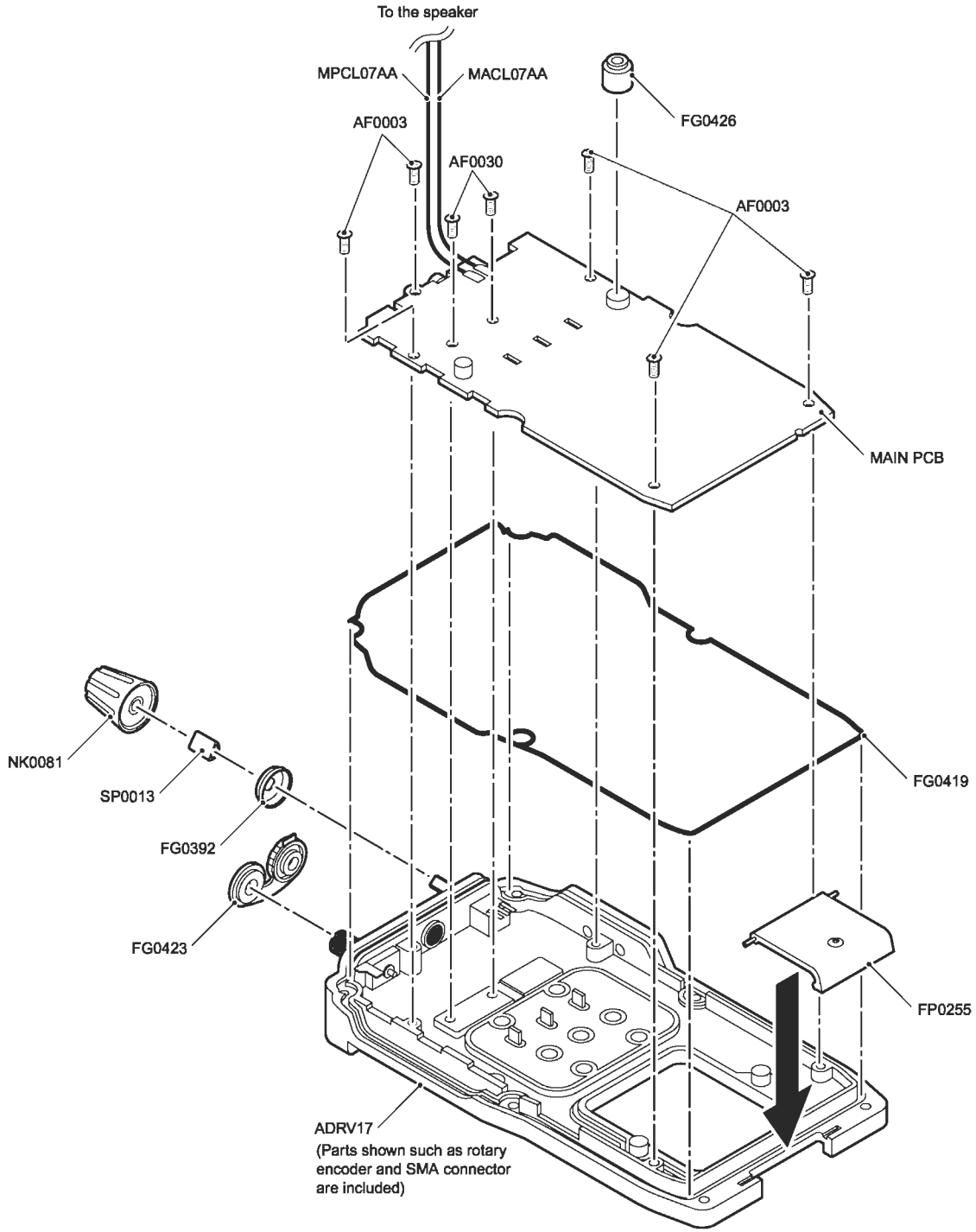
SEGMENT



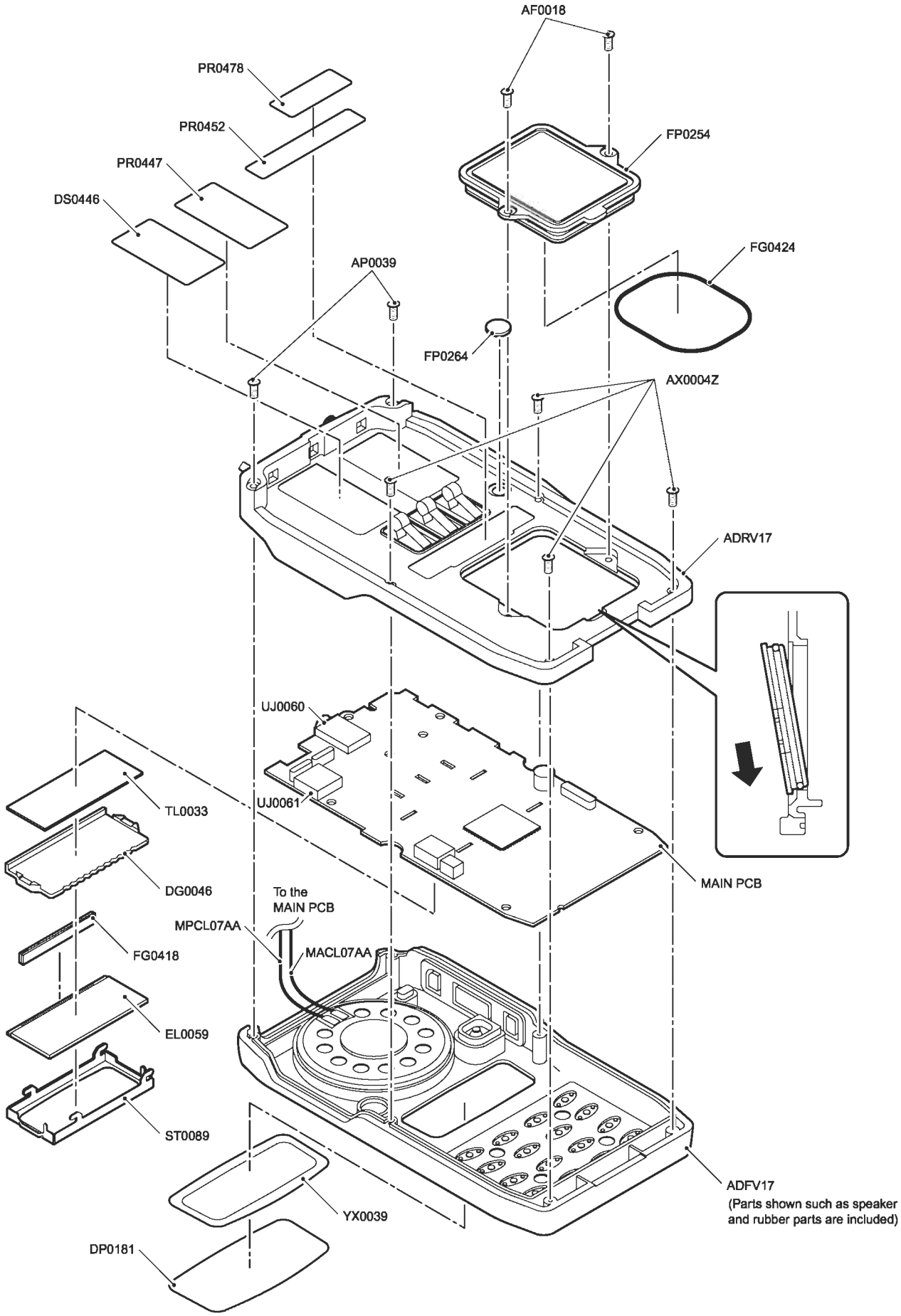
COMMON

EXPLODED VIEW

1) Front View



2) Rear View


AF0018
PR0478
PR0452
PR0447
DS0446
FP0254
FG0424
AP0039
FP0264
AX0004Z
ADRV17
UJ0060
UJ0061
TL0033
DG0046
To the
MAIN PCB
MPCL07AA
MACL07AA
FG0418
EL0059
ST0089
YX0039
DP0181
MAIN PCB
ADFV17
(Parts shown such as speaker
and rubber parts are included)

PARTS LIST<DJ-V17>

MAIN Unit

Model:DJ-V17

Ref. No.	Parts No.	Description	Parts Name	Version
C101	CU3035	Chip C	C1608JB1H102KT-AS	
C102	CU3035	Chip C	C1608JB1H102KT-AS	
C103	CU3023	Chip C	C1608CH1H101JT-AS	
C104	CU3513	Chip C	GRP1552C1H150JZ01E	
C105	CU3523	Chip C	GRP1552C1H101JD01E	
C106	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C107	CU3013	Chip C	C1608CH1H150JT-AS	
C108	CU3014	Chip C	C1608CH1H180JT-AS	
C109	CU3016	Chip C	C1608CH1H270JT-AS	TFH, R
C109	CU3018	Chip C	C1608CH1H390JT-AS	T, E, EUK
C110	CU3017	Chip C	C1608CH1H330JT-AS	
C111	CU3019	Chip C	C1608CH1H470JT-AS	
C112	CU3015	Chip C	C1608CH1H220JT-AS	
C113	CU3015	Chip C	C1608CH1H220JT-AS	
C114	CU3018	Chip C	C1608CH1H390JT-AS	TFH, R
C114	CU3019	Chip C	C1608CH1H470JT-AS	T, E, EUK
C115	CU3516	Chip C	GRP1552C1H270JZ01E	
C116	CU3535	Chip C	GRP155B11H102KA01E	
C117	CU3517	Chip C	GRP1552C1H330JZ01E	
C118	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C119	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C120	CU3012	Chip C	C1608CH1H120JT-AS	
C121	CU3005	Chip C	C1608CH1H040CT-AS	
C122	CU3547	Chip C	GRP155B11C103KA01E	
C123	CU3517	Chip C	GRP1552C1H330JZ01E	
C124	CU3012	Chip C	C1608CH1H120JT-AS	
C125	CU3013	Chip C	C1608CH1H150JT-AS	
C126	CU3013	Chip C	C1608CH1H150JT-AS	
C127	CU3013	Chip C	C1608CH1H150JT-AS	
C128	CU3554	Chip C	GRP155B11A104KA01E	
C129	CU3535	Chip C	GRP155B11H102KA01E	
C130	CU3535	Chip C	GRP155B11H102KA01E	
C131	CU3512	Chip C	GRP1552C1H120JZ01E	
C132	CU3547	Chip C	GRP155B11C103KA01E	
C133	CU3535	Chip C	GRP155B11H102KA01E	
C134	CU3547	Chip C	GRP155B11C103KA01E	
C135	CU3535	Chip C	GRP155B11H102KA01E	
C136	CU3535	Chip C	GRP155B11H102KA01E	
C137	CU3511	Chip C	GRP1552C1H100JZ01E	
C138	CU3523	Chip C	GRP1552C1H101JD01E	
C139	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C140	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C141	CU3535	Chip C	GRP155B11H102KA01E	
C142	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C143	CU3535	Chip C	GRP155B11H102KA01E	
C144	CU3535	Chip C	GRP155B11H102KA01E	
C145	CU3535	Chip C	GRP155B11H102KA01E	
C146	CU3535	Chip C	GRP155B11H102KA01E	
C147	CU3516	Chip C	GRP1552C1H270JZ01E	
C148	CU3535	Chip C	GRP155B11H102KA01E	
C149	CU3535	Chip C	GRP155B11H102KA01E	
C150	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C151	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C152	NC			
C153	NC			
C154	NC			
C155	CU3559	Chip C	GRM155B30J105KE18D	

Ref. No.	Parts No.	Description	Parts Name	Version
C156	CU3515	Chip C	GRP1552C1H220JZ01E	
C157	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C158	CU3535	Chip C	GRP155B11H102KA01E	
C159	CU3535	Chip C	GRP155B11H102KA01E	
C160	NC			
C161	NC			
C162	CU3529	Chip C	GRP155B11H331KD01E	
C163	CS0426	Chip Tantalum	F931A106MAA	
C164	CS0426	Chip Tantalum	F931A106MAA	
C165	CU3554	Chip C	GRP155B11A104KA01E	
C166	CU3535	Chip C	GRP155B11H102KA01E	
C167	NC			
C168	CU3535	Chip C	GRP155B11H102KA01E	
C169	CU3535	Chip C	GRP155B11H102KA01E	
C170	NC			
C171	CU3535	Chip C	GRP155B11H102KA01E	
C172	NC			
C173	CU3535	Chip C	GRP155B11H102KA01E	
C174	CS0396	Chip Tantalum	TMCP1D104MTR	
C176	CU3511	Chip C	GRP1552C1H100JZ01E	
C177	CU3513	Chip C	GRP1552C1H150JZ01E	
C178	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C179	CU3133	Chip C	TMK107BJ105KA-T	
C180	CU3535	Chip C	GRP155B11H102KA01E	
C181	CU3535	Chip C	GRP155B11H102KA01E	
C182	CU3133	Chip C	TMK107BJ105KA-T	
C183	CS0398	Chip Tantalum	TMCP0J225MTR	
C184	CU3506	Chip C	GRP1552C1H5R0CZ01E	
C185	CU3535	Chip C	GRP155B11H102KA01E	
C186	CU3554	Chip C	GRP155B11A104KA01E	
C187	CU3511	Chip C	GRP1552C1H100JZ01E	
C188	CU3535	Chip C	GRP155B11H102KA01E	
C189	CU3535	Chip C	GRP155B11H102KA01E	
C190	CU3504	Chip C	GRP1553C1H3R0CZ01E	
C191	NC			
C192	CU3504	Chip C	GRP1553C1H3R0CZ01E	
C193	CU3503	Chip C	GRP1554C1H2R0CZ01E	TFH, R
C193	CU3504	Chip C	GRP1553C1H3R0CZ01E	T, E, EUK
C194	CU3535	Chip C	GRP155B11H102KA01E	
C195	CU3512	Chip C	GRP1552C1H120JZ01E	
C196	CU3559	Chip C	GRM155B30J105KE18D	
C197	NC			
C198	NC			
C199	CU3535	Chip C	GRP155B11H102KA01E	
C200	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C201	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C202	NC			
C204	CU3535	Chip C	GRP155B11H102KA01E	
C205	CU3535	Chip C	GRP155B11H102KA01E	
C206	CU3535	Chip C	GRP155B11H102KA01E	
C207	CU3547	Chip C	GRP155B11C103KA01E	
C208	CU3524	Chip C	GRP1552C1H121JD01E	
C209	CU3515	Chip C	GRP1552C1H220JZ01E	
C210	NC			
C211	CU3547	Chip C	GRP155B11C103KA01E	
C212	CU3523	Chip C	GRP1552C1H101JD01E	
C213	CU3535	Chip C	GRP155B11H102KA01E	

Ref. No.	Parts No.	Description	Parts Name	Version
C214	CU3535	Chip C	GRP155B11H102KA01E	
C215	CU3517	Chip C	GRP1552C1H330JZ01E	
C216	CU3520	Chip C	GRP1552C1H560JD01E	
C217	CU3535	Chip C	GRP155B11H102KA01E	
C218	CU3547	Chip C	GRP155B11C103KA01E	
C219	CU3521	Chip C	GRP1552C1H680JD01E	
C220	CU3519	Chip C	GRP1552C1H470JZ01E	
C221	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C222	CU3507	Chip C	GRP1552C1H6R0DZ01E	
C223	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C224	CU3535	Chip C	GRP155B11H102KA01E	
C225	CU3535	Chip C	GRP155B11H102KA01E	
C226	CU3133	Chip C	TMK107BJ105KA-T	
C227	CU3536	Chip C	GRM36B122K50PT	
C228	CU3547	Chip C	GRP155B11C103KA01E	
C229	CU3547	Chip C	GRP155B11C103KA01E	
C230	CU3554	Chip C	GRP155B11A104KA01E	
C231	CU3554	Chip C	GRP155B11A104KA01E	
C232	CU3522	Chip C	GRP1552C1H820JD01E	
C233	CU3535	Chip C	GRP155B11H102KA01E	
C234	CU3554	Chip C	GRP155B11A104KA01E	
C235	CU3554	Chip C	GRP155B11A104KA01E	
C236	CU3523	Chip C	GRP1552C1H101JD01E	
C237	CU3554	Chip C	GRP155B11A104KA01E	
C238	CU3535	Chip C	GRP155B11H102KA01E	
C239	CU3535	Chip C	GRP155B11H102KA01E	
C240	NC			
C241	CU3554	Chip C	GRP155B11A104KA01E	
C242	CU3547	Chip C	GRP155B11C103KA01E	
C243	CU3535	Chip C	GRP155B11H102KA01E	
C244	CU3554	Chip C	GRP155B11A104KA01E	
C245	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C246	CU3559	Chip C	GRM155B30J105KE18D	
C247	CU3535	Chip C	GRP155B11H102KA01E	
C248	CU3535	Chip C	GRP155B11H102KA01E	
C249	CU3547	Chip C	GRP155B11C103KA01E	
C250	CU3535	Chip C	GRP155B11H102KA01E	
C251	CU3547	Chip C	GRP155B11C103KA01E	
C252	CU3521	Chip C	GRP1552C1H680JD01E	
C253	CU3535	Chip C	GRP155B11H102KA01E	
C254	CU3535	Chip C	GRP155B11H102KA01E	
C255	CU3553	Chip C	GRP155B11A473KA01E	
C256	CU3554	Chip C	GRP155B11A104KA01E	
C257	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C258	CU3554	Chip C	GRP155B11A104KA01E	
C259	CU3535	Chip C	GRP155B11H102KA01E	
C260	CU3527	Chip C	GRP1552C1E221JD01E	
C261	CU3522	Chip C	GRP1552C1H820JD01E	
C262	CU3554	Chip C	GRP155B11A104KA01E	
C263	CU3535	Chip C	GRP155B11H102KA01E	
C264	CU3554	Chip C	GRP155B11A104KA01E	
C265	CU3531	Chip C	GRP155B11H471KD01E	
C266	CU3554	Chip C	GRP155B11A104KA01E	
C267	CU3527	Chip C	GRP1552C1E221JD01E	
C268	CU3535	Chip C	GRP155B11H102KA01E	
C269	CU3547	Chip C	GRP155B11C103KA01E	
C270	CU3535	Chip C	GRP155B11H102KA01E	
C271	CU3535	Chip C	GRP155B11H102KA01E	
C272	CU3559	Chip C	GRM155B30J105KE18D	
C273	CU3513	Chip C	GRP1552C1H150JZ01E	

Ref. No.	Parts No.	Description	Parts Name	Version
C274	CU3514	Chip C	GRP1552C1H180JZ01E	
C275	CU3543	Chip C	GRP155B11E472KD01E	
C276	CU3535	Chip C	GRP155B11H102KA01E	
C277	CU3133	Chip C	TMK107BJ105KA-T	
C278	CU3535	Chip C	GRP155B11H102KA01E	
C279	CS0439	Chip Tantalum	TMCMA0J476MTRF	
C280	CU3554	Chip C	GRP155B11A104KA01E	
C281	CE0437	Electrolytic C	10CE150BSS	
C282	CU3554	Chip C	GRP155B11A104KA01E	
C283	CU3551	Chip C	GRP155B11C223KD01E	
C284	CU3551	Chip C	GRP155B11C223KD01E	
C285	CU3535	Chip C	GRP155B11H102KA01E	
C286	CU3535	Chip C	GRP155B11H102KA01E	
C287	CU3554	Chip C	GRP155B11A104KA01E	
C288	CU3559	Chip C	GRM155B30J105KE18D	
C289	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C290	CS0397	Chip Tantalum	TMCP1C105MTR	
C291	CU3535	Chip C	GRP155B11H102KA01E	
C292	CS0440	Chip Tantalum	TMCMB1C476MTRF	
C293	CU3559	Chip C	GRM155B30J105KE18D	
C294	CU3554	Chip C	GRP155B11A104KA01E	
C295	CU3535	Chip C	GRP155B11H102KA01E	
C296	CU3554	Chip C	GRP155B11A104KA01E	
C297	CU3553	Chip C	GRP155B11A473KA01E	
C298	CU3535	Chip C	GRP155B11H102KA01E	
C299	CU3535	Chip C	GRP155B11H102KA01E	
C300	NC			
C301	NC			
C302	CU3535	Chip C	GRP155B11H102KA01E	
C303	CU3551	Chip C	GRP155B11C223KD01E	
C304	CU3552	Chip C	GRP155B11A333KA01E	
C305	CU3554	Chip C	GRP155B11A104KA01E	
C306	CU3535	Chip C	GRP155B11H102KA01E	
C307	CS0439	Chip Tantalum	TMCMA0J476MTRF	
C308	CU3535	Chip C	GRP155B11H102KA01E	
C309	CU3535	Chip C	GRP155B11H102KA01E	
C310	CU3535	Chip C	GRP155B11H102KA01E	
C311	CU3535	Chip C	GRP155B11H102KA01E	
C312	CS0426	Chip Tantalum	F931A106MAA	
C313	CU3535	Chip C	GRP155B11H102KA01E	
C314	CU3547	Chip C	GRP155B11C103KA01E	
C315	CU3547	Chip C	GRP155B11C103KA01E	
C316	CU3535	Chip C	GRP155B11H102KA01E	
C317	CU3535	Chip C	GRP155B11H102KA01E	
C318	CU3535	Chip C	GRP155B11H102KA01E	
C319	CU3535	Chip C	GRP155B11H102KA01E	
C320	CU3554	Chip C	GRP155B11A104KA01E	
C321	CS0439	Chip Tantalum	TMCMA0J476MTRF	
C322	CU3554	Chip C	GRP155B11A104KA01E	
C323	CU3547	Chip C	GRP155B11C103KA01E	
C324	CU3547	Chip C	GRP155B11C103KA01E	
C325	CU3535	Chip C	GRP155B11H102KA01E	
C326	CE0436	Electrolytic C	16CE47BSS	
C327	CU3133	Chip C	TMK107BJ105KA-T	
C328	CU3535	Chip C	GRP155B11H102KA01E	
C331	CU3535	Chip C	GRP155B11H102KA01E	
C332	CU3554	Chip C	GRP155B11A104KA01E	
C334	NC			
C336	CS0396	Chip Tantalum	TMCP1D104MTR	
C347	CU3535	Chip C	GRP155B11H102KA01E	

Ref. No.	Parts No.	Description	Parts Name	Version
C348	CU3507	Chip C	GRP1552C1H6R0DZ01E	
C349	CU3559	Chip C	GRM155B30J105KE18D	
C350	CU3559	Chip C	GRM155B30J105KE18D	
C351	CU3133	Chip C	TMK107BJ105KA-T	
C352	CU3535	Chip C	GRP155B11H102KA01E	
C353	CU3535	Chip C	GRP155B11H102KA01E	
C354	CU3535	Chip C	GRP155B11H102KA01E	
C355	CS0398	Chip Tantalum	TMCP0J225MTR	
C356	CU3547	Chip C	GRP155B11C103KA01E	
C357	NC			
C358	NC			
C360	CU3535	Chip C	GRP155B11H102KA01E	
C362	CU3535	Chip C	GRP155B11H102KA01E	
C363	CU3535	Chip C	GRP155B11H102KA01E	
C370	CU3035	Chip C	C1608JB1H102KT-AS	
CN101	NC			
CN102	NC			
CN103	UE0506	Connector	AXK520135P	
D101	XD0422	Diode	HSC277TRF-E	
D102	XD0419	Diode	1SS400TE61	
D103	XD0422	Diode	HSC277TRF-E	
D104	XD0417	Diode	HVC202BTRU-E	
D105	XD0251	Diode	MA741WA-(TX)	
D106	NC			
D107	XD0421	Diode	1SV323(TPH3,H)	
D108	XD0422	Diode	HSC277TRF-E	
D109	XD0421	Diode	1SV323(TPH3,H)	
D110	NC			
D111	NC			
D112	XD0423	Diode	HVC132TRF-E	
D113	XD0422	Diode	HSC277TRF-E	
D114	XD0422	Diode	HSC277TRF-E	
D115	XD0421	Diode	1SV323(TPH3,H)	
D116	XD0421	Diode	1SV323(TPH3,H)	
D117	XD0421	Diode	1SV323(TPH3,H)	
D118	XD0421	Diode	1SV323(TPH3,H)	
D119	XL0097	Chip LED	SML-521MUWT86	
D120	XD0338	Diode	1SS362(TE85L)	
D121	XD0419	Diode	1SS400TE61	
D122	XD0424	Diode	S3JB-T	
D123	XD0420	Diode	FA3J3STP	
D124	XD0338	Diode	1SS362(TE85L)	
D125	XD0420	Diode	FA3J3STP	
D126	XL0036	Chip LED	SML-310MTT86	
D127	XL0036	Chip LED	SML-310MTT86	
D128	XL0036	Chip LED	SML-310MTT86	
D129	XL0036	Chip LED	SML-310MTT86	
D130	XD0416	Diode	1SS423(TE85L,F)	
D131	XL0036	Chip LED	SML-310MTT86	
D132	XL0036	Chip LED	SML-310MTT86	
D133	XD0418	Diode	RB521S-30TE61	
D134	XD0418	Diode	RB521S-30TE61	
FL101	XF0041	MCF	UM5 21.7M 21R15A5	
FL102	XF0041	MCF	UM5 21.7M 21R15A5	
FL103	XC0060	Filter	ALFYM450F=K	
IC101	XA1107	IC	MB15E07SR	
IC102	XA1106	IC	LM2902PWR	
IC103	XA0404	IC	TA31136FN(EL)	
IC104	XA1120	IC	S80845CLNB-B66-T2G	
IC105	XA1117	IC	S24CS64A01-J8T1G	

Ref. No.	Parts No.	Description	Parts Name	Version
IC106	XA0210	IC	NJM2070M T1	
IC107	XA1118	IC	M62429FP/CF0J	
IC108	XA1106	IC	LM2902PWR	
IC109	XA1121	CPU	M38268MCA-076GP#UO	
IC110	XA1119	IC	XC6202P502MR	
JK101	UJ0060	Jack	HSJ1594-010150	
JK102	UJ0061	Jack	LD-0208-1.3	
L101	QS401556	Coil	0.40-1.55-6TL	
L102	QS402006	Coil	0.40-2.0-6TL	
L103	QS402006	Coil	0.40-2.0-6TL	
L104	QS401405	Coil	0.40-1.4-5TL	
L105	QS501403	Coil	0.50-1.4-3TL	
L106	QC0757	Chip Inductor	C1608CB22NJ	
L107	QC0809	Chip Inductor	MLG1005S56NJT	
L108	QS30200D	Coil	0.30-2.0-13TL	
L109	QC0810	Chip Inductor	MLG1005S68NJT	
L110	QC0765	Chip Inductor	C1608CBR10J	
L111	QC0808	Chip Inductor	MLG1005S47NJT	
L112	QC0773	Chip Inductor	C1608CBR47J	
L113	QS402057	Coil	0.40-2.05-7TL	
L114	QB0057	Chip Inductor	MPZ1608S101AT	
L115	QB0057	Chip Inductor	MPZ1608S101AT	
L116	QC0812	Chip Inductor	MLG1005SR10JT	
L117	QC0818	Chip Inductor	C2012H82NH	
L118	QB0057	Chip Inductor	MPZ1608S101AT	
L120	QC0816	Chip Inductor	MLG1005SR22JT	
L121	QC0812	Chip Inductor	MLG1005SR10JT	
L122	NC			
L123	NC			
L124	QC0773	Chip Inductor	C1608CBR47J	
L125	QC0764	Chip Inductor	C1608CB82NJ	
L126	QC0763	Chip Inductor	C1608CB68NJ	
L127	QC0773	Chip Inductor	C1608CBR47J	
L128	QC0764	Chip Inductor	C1608CB82NJ	
L129	QC0763	Chip Inductor	C1608CB68NJ	
L130	QC0820	Chip Inductor	LB2518T151K	
L131	QC0842	Chip Inductor	LB2518T221K	
LCD101	EL0059	LCD	LCD DJ170	
MIC101	EY0017	Microphone	OB-27P44	
Q101	XT0210	Transistor	2SC6026MFV-GR	
Q102	XE0071	FET	2SK3476(TE12L,Q)	
Q103	XE0070	FET	2SK3475(TE12L,F)	
Q104	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q105	NC			
Q106	XT0213	Transistor	2SC5659T2L	
Q107	XT0213	Transistor	2SC5659T2L	
Q108	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q109	NC			
Q110	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q111	XT0214	Transistor	HN2C01FE-GR(T5L,F)	
Q112	XU0210	Transistor	RN1107MFV(TPL3)	
Q113	XT0219	Transistor	15GN03F-TL-E	
Q114	XE0053	FET	3SK293 TE85L	
Q115	NC			
Q116	XE0053	FET	3SK293 TE85L	
Q117	XU0210	Transistor	RN1107MFV(TPL3)	
Q118	XT0219	Transistor	15GN03F-TL-E	
Q119	XT0213	Transistor	2SC5659T2L	
Q120	XT0210	Transistor	2SC6026MFV-GR	
Q121	XU0212	Transistor	RN2115MFV(TPL3)	

Ref. No.	Parts No.	Description	Parts Name	Version
Q122	XU0210	Transistor	RN1107MFV(TPL3)	
Q123	NC			
Q124	XU0220	Transistor	RN2111MFV(TLP3)	
Q125	XU0210	Transistor	RN1107MFV(TPL3)	
Q126	XU0210	Transistor	RN1107MFV(TPL3)	
Q127	XU0220	Transistor	RN2111MFV(TLP3)	
Q128	XT0210	Transistor	2SC6026MFV-GR	
Q129	XT0210	Transistor	2SC6026MFV-GR	
Q130	XT0170	Transistor	2SB766A-(TX)R	
Q131	XT0210	Transistor	2SC6026MFV-GR	
Q132	XT0170	Transistor	2SB766A-(TX)R	
Q133	XE0069	FET	SSM3K15FV(TPL3,Z)	
Q134	XU0210	Transistor	RN1107MFV(TPL3)	
Q135	XT0214	Transistor	HN2C01FE-GR(T5L,F)	
Q136	XT0170	Transistor	2SB766A-(TX)R	
Q137	XT0212	Transistor	2SA1955FV-A(TPL3)	
Q138	XT0212	Transistor	2SA1955FV-A(TPL3)	
Q139	XT0214	Transistor	HN2C01FE-GR(T5L,F)	
Q140	XT0212	Transistor	2SA1955FV-A(TPL3)	
Q141	XT0210	Transistor	2SC6026MFV-GR	
Q142	XU0213	Transistor	RN1111MFV(TPL3),F	
Q143	XU0213	Transistor	RN1111MFV(TPL3),F	
Q144	XU0210	Transistor	RN1107MFV(TPL3)	
Q145	XU0211	Transistor	RN2107MFV(TPL3)	
Q146	XU0213	Transistor	RN1111MFV(TPL3),F	
Q147	XE0069	FET	SSM3K15FV(TPL3,Z)	
Q148	XE0069	FET	SSM3K15FV(TPL3,Z)	
Q149	XT0210	Transistor	2SC6026MFV-GR	
Q152	XU0211	Transistor	RN2107MFV(TPL3)	
Q153	XU0211	Transistor	RN2107MFV(TPL3)	
R101	RK3534	Chip R	ERJ2GEJ471X	
R102	RK3545	Chip R	ERJ2GEJ392X	
R103	RK3501	Chip R	ERJ2GE0R00X	
R104	RK3501	Chip R	ERJ2GE0R00X	
R105	RK3556	Chip R	ERJ2GEJ333X	
R106	RK3574	Chip R	ERJ2GEJ105X	
R107	RK3526	Chip R	ERJ2GEJ101X	
R108	RK3534	Chip R	ERJ2GEJ471X	
R109	RK3030	Chip R	MCR03EZHJ221	
R111	RK3542	Chip R	ERJ2GEJ222X	
R112	RK3556	Chip R	ERJ2GEJ333X	
R113	RK3548	Chip R	ERJ2GEJ682X	
R114	RK3574	Chip R	ERJ2GEJ105X	
R115	RK3550	Chip R	ERJ2GEJ103X	
R116	RK3022	Chip R	MCR03EZHJ470	
R117	RK3530	Chip R	ERJ2GEJ221X	
R118	RK3526	Chip R	ERJ2GEJ101X	
R119	RK3566	Chip R	ERJ2GEJ224X	
R120	RK3550	Chip R	ERJ2GEJ103X	
R121	RK3538	Chip R	ERJ2GEJ102X	
R122	NC			
R123	RK3522	Chip R	ERJ2GEJ470X	
R124	NC			
R125	NC			
R126	RK3562	Chip R	ERJ2GEJ104X	
R127	RK3565	Chip R	ERJ2GEJ184X	
R128	RK3550	Chip R	ERJ2GEJ103X	
R129	RK3574	Chip R	ERJ2GEJ105X	
R130	RK3538	Chip R	ERJ2GEJ102X	
R131	RK3552	Chip R	ERJ2GEJ153X	

Ref. No.	Parts No.	Description	Parts Name	Version
R132	RK3531	Chip R	ERJ2GEJ271X	
R133	RK3550	Chip R	ERJ2GEJ103X	
R134	RK3551	Chip R	ERJ2GEJ123X	
R135	RK3551	Chip R	ERJ2GEJ123X	
R136	RK3538	Chip R	ERJ2GEJ102X	
R137	RK3551	Chip R	ERJ2GEJ123X	
R138	RK3562	Chip R	ERJ2GEJ104X	
R139	RK3550	Chip R	ERJ2GEJ103X	
R140	NC			
R141	RK3557	Chip R	ERJ2GEJ393X	
R142	NC			
R143	RK3546	Chip R	ERJ2GEJ472X	
R144	NC			
R145	RK3550	Chip R	ERJ2GEJ103X	
R146	RK3537	Chip R	ERJ2GEJ821X	
R147	RK3526	Chip R	ERJ2GEJ101X	
R148	RK3542	Chip R	ERJ2GEJ222X	
R149	NC			
R150	RK3550	Chip R	ERJ2GEJ103X	
R151	RK3550	Chip R	ERJ2GEJ103X	
R152	RK3547	Chip R	ERJ2GEJ562X	
R154	RK3570	Chip R	ERJ2GEJ474X	
R155	RK3542	Chip R	ERJ2GEJ222X	
R156	RK3538	Chip R	ERJ2GEJ102X	
R157	RK3550	Chip R	ERJ2GEJ103X	
R159	RK3539	Chip R	ERJ2GEJ122X	
R161	RK3538	Chip R	ERJ2GEJ102X	
R162	RK3564	Chip R	ERJ2GEJ154X	
R163	RK3522	Chip R	ERJ2GEJ470X	
R164	RK3550	Chip R	ERJ2GEJ103X	
R165	RK3544	Chip R	ERJ2GEJ332X	
R166	RK3530	Chip R	ERJ2GEJ221X	
R167	RK3542	Chip R	ERJ2GEJ222X	
R168	RK3526	Chip R	ERJ2GEJ101X	
R169	RK3550	Chip R	ERJ2GEJ103X	
R170	RK3530	Chip R	ERJ2GEJ221X	
R171	RK3526	Chip R	ERJ2GEJ101X	
R172	NC			
R173	NC			
R174	RK3530	Chip R	ERJ2GEJ221X	
R175	RK3550	Chip R	ERJ2GEJ103X	
R176	RK3570	Chip R	ERJ2GEJ474X	
R177	RK3550	Chip R	ERJ2GEJ103X	
R178	RK3550	Chip R	ERJ2GEJ103X	
R179	RK3538	Chip R	ERJ2GEJ102X	
R180	NC			
R181	RK3550	Chip R	ERJ2GEJ103X	
R182	RK3566	Chip R	ERJ2GEJ224X	
R183	NC			
R184	NC			
R185	RK3562	Chip R	ERJ2GEJ104X	
R186	RK3550	Chip R	ERJ2GEJ103X	
R187	RK3526	Chip R	ERJ2GEJ101X	
R188	RK3538	Chip R	ERJ2GEJ102X	
R189	RK3539	Chip R	ERJ2GEJ122X	
R190	NC			
R191	RK3550	Chip R	ERJ2GEJ103X	
R192	RK3558	Chip R	ERJ2GEJ473X	
R193	RK3562	Chip R	ERJ2GEJ104X	
R194	RK3522	Chip R	ERJ2GEJ470X	

Ref. No.	Parts No.	Description	Parts Name	Version
R195	RK3558	Chip R	ERJ2GEJ473X	
R196	RK3558	Chip R	ERJ2GEJ473X	
R197	RK3574	Chip R	ERJ2GEJ105X	
R198	RK3574	Chip R	ERJ2GEJ105X	
R199	RK3553	Chip R	ERJ2GEJ183X	
R200	RK3560	Chip R	ERJ2GEJ683X	
R201	RK3522	Chip R	ERJ2GEJ470X	
R202	RK3539	Chip R	ERJ2GEJ122X	
R203	RK3566	Chip R	ERJ2GEJ224X	
R204	RK3574	Chip R	ERJ2GEJ105X	
R205	RK3574	Chip R	ERJ2GEJ105X	
R206	RK3558	Chip R	ERJ2GEJ473X	
R207	RK3556	Chip R	ERJ2GEJ333X	
R208	NC			
R209	RK3526	Chip R	ERJ2GEJ101X	
R210	RK3522	Chip R	ERJ2GEJ470X	
R211	RK3558	Chip R	ERJ2GEJ473X	
R212	RK3550	Chip R	ERJ2GEJ103X	
R213	RK3562	Chip R	ERJ2GEJ104X	
R214	RK3564	Chip R	ERJ2GEJ154X	
R215	RK3561	Chip R	ERJ2GEJ823X	
R216	RK3538	Chip R	ERJ2GEJ102X	
R218	RK3558	Chip R	ERJ2GEJ473X	
R219	RK3564	Chip R	ERJ2GEJ154X	
R220	RK3556	Chip R	ERJ2GEJ333X	
R221	RK3548	Chip R	ERJ2GEJ682X	
R222	RK3558	Chip R	ERJ2GEJ473X	
R223	RK3550	Chip R	ERJ2GEJ103X	
R224	RK3550	Chip R	ERJ2GEJ103X	
R225	RK3554	Chip R	ERJ2GEJ223X	
R226	RK3554	Chip R	ERJ2GEJ223X	
R227	RK3559	Chip R	ERJ2GEJ563X	
R228	RK3550	Chip R	ERJ2GEJ103X	
R229	RK3550	Chip R	ERJ2GEJ103X	
R230	RK3562	Chip R	ERJ2GEJ104X	
R231	RK3538	Chip R	ERJ2GEJ102X	
R232	RK3568	Chip R	ERJ2GEJ334X	
R234	RK3550	Chip R	ERJ2GEJ103X	
R235	RK3562	Chip R	ERJ2GEJ104X	
R236	RK3562	Chip R	ERJ2GEJ104X	
R237	RK3522	Chip R	ERJ2GEJ470X	
R238	RK3550	Chip R	ERJ2GEJ103X	
R239	RK3567	Chip R	ERJ2GEJ274X	
R240	RK3562	Chip R	ERJ2GEJ104X	
R242	RK3501	Chip R	ERJ2GE0R00X	
R243	RK3550	Chip R	ERJ2GEJ103X	
R244	RK3564	Chip R	ERJ2GEJ154X	
R245	RK3544	Chip R	ERJ2GEJ332X	
R246	RK3562	Chip R	ERJ2GEJ104X	
R247	RK3564	Chip R	ERJ2GEJ154X	
R248	RK3538	Chip R	ERJ2GEJ102X	
R249	RK3565	Chip R	ERJ2GEJ184X	
R250	RK3550	Chip R	ERJ2GEJ103X	
R251	RK3562	Chip R	ERJ2GEJ104X	
R252	RK3561	Chip R	ERJ2GEJ823X	
R253	RK3566	Chip R	ERJ2GEJ224X	
R254	RK3550	Chip R	ERJ2GEJ103X	
R255	RK3562	Chip R	ERJ2GEJ104X	
R256	RK3562	Chip R	ERJ2GEJ104X	
R257	RK3538	Chip R	ERJ2GEJ102X	

Ref. No.	Parts No.	Description	Parts Name	Version
R258	RK3574	Chip R	ERJ2GEJ105X	
R259	RK3566	Chip R	ERJ2GEJ224X	
R260	RK3553	Chip R	ERJ2GEJ183X	
R261	RK3574	Chip R	ERJ2GEJ105X	
R262	RK3562	Chip R	ERJ2GEJ104X	
R263	RK3562	Chip R	ERJ2GEJ104X	
R264	RK3558	Chip R	ERJ2GEJ473X	
R265	RK3536	Chip R	ERJ2GEJ681X	
R266	RK3518	Chip R	ERJ2GEJ220X	
R267	NC			
R269	RK3532	Chip R	ERJ2GEJ331X	
R270	RK3560	Chip R	ERJ2GEJ683X	
R272	RK3556	Chip R	ERJ2GEJ333X	
R273	RK3566	Chip R	ERJ2GEJ224X	
R274	RK3544	Chip R	ERJ2GEJ332X	
R275	RK3566	Chip R	ERJ2GEJ224X	
R276	RK3560	Chip R	ERJ2GEJ683X	
R277	RK3552	Chip R	ERJ2GEJ153X	
R278	RK3562	Chip R	ERJ2GEJ104X	
R279	RK3558	Chip R	ERJ2GEJ473X	
R280	RK3556	Chip R	ERJ2GEJ333X	
R281	RK3017	Chip R	MCR03EZHJ180	
R282	RK3514	Chip R	ERJ2GEJ100X	
R283	RK3554	Chip R	ERJ2GEJ223X	
R284	RK3561	Chip R	ERJ2GEJ823X	
R285	RK3550	Chip R	ERJ2GEJ103X	
R286	RK3570	Chip R	ERJ2GEJ474X	
R287	RK3550	Chip R	ERJ2GEJ103X	
R288	RK3550	Chip R	ERJ2GEJ103X	
R289	RK3565	Chip R	ERJ2GEJ184X	
R290	RK3017	Chip R	MCR03EZHJ180	
R291	RK3551	Chip R	ERJ2GEJ123X	
R292	RK3569	Chip R	ERJ2GEJ394X	
R293	RK3532	Chip R	ERJ2GEJ331X	
R294	RK3562	Chip R	ERJ2GEJ104X	
R295	RK3538	Chip R	ERJ2GEJ102X	
R296	RK3530	Chip R	ERJ2GEJ221X	
R297	RK3546	Chip R	ERJ2GEJ472X	
R298	RK3550	Chip R	ERJ2GEJ103X	
R299	RK3550	Chip R	ERJ2GEJ103X	
R300	RK3538	Chip R	ERJ2GEJ102X	
R301	RK3501	Chip R	ERJ2GE0R00X	
R302	RK3538	Chip R	ERJ2GEJ102X	
R303	RK3550	Chip R	ERJ2GEJ103X	
R304	RK3546	Chip R	ERJ2GEJ472X	
R305	RK3550	Chip R	ERJ2GEJ103X	
R306	RK3550	Chip R	ERJ2GEJ103X	
R308	RK3574	Chip R	ERJ2GEJ105X	
R309	RK3574	Chip R	ERJ2GEJ105X	
R310	RK3550	Chip R	ERJ2GEJ103X	
R311	RK3550	Chip R	ERJ2GEJ103X	
R312	RK3570	Chip R	ERJ2GEJ474X	
R313	RK3550	Chip R	ERJ2GEJ103X	
R314	RK3554	Chip R	ERJ2GEJ223X	
R315	RK3542	Chip R	ERJ2GEJ222X	
R316	RK3550	Chip R	ERJ2GEJ103X	
R317	RK3570	Chip R	ERJ2GEJ474X	
R318	RK3550	Chip R	ERJ2GEJ103X	
R319	RK3554	Chip R	ERJ2GEJ223X	
R320	RK3574	Chip R	ERJ2GEJ105X	

Model:DJ-V17

Ref. No.	Parts No.	Description	Parts Name	Version
R321	RK3550	Chip R	ERJ2GEJ103X	
R322	RK3568	Chip R	ERJ2GEJ334X	
R323	RK3550	Chip R	ERJ2GEJ103X	
R324	RK3548	Chip R	ERJ2GEJ682X	
R325	RK3559	Chip R	ERJ2GEJ563X	
R326	RK3559	Chip R	ERJ2GEJ563X	
R327	RK3550	Chip R	ERJ2GEJ103X	
R328	RK3550	Chip R	ERJ2GEJ103X	
R330	RK3546	Chip R	ERJ2GEJ472X	
R331	RK3546	Chip R	ERJ2GEJ472X	
R332	RK3546	Chip R	ERJ2GEJ472X	
R333	RK3546	Chip R	ERJ2GEJ472X	
R334	RK3562	Chip R	ERJ2GEJ104X	
R335	RK3562	Chip R	ERJ2GEJ104X	
R336	RK3562	Chip R	ERJ2GEJ104X	
R337	RK3550	Chip R	ERJ2GEJ103X	
R338	RK3542	Chip R	ERJ2GEJ222X	
R339	RK3550	Chip R	ERJ2GEJ103X	
R340	RK3550	Chip R	ERJ2GEJ103X	
R341	RK3550	Chip R	ERJ2GEJ103X	
R342	RK3538	Chip R	ERJ2GEJ102X	
R343	RK3550	Chip R	ERJ2GEJ103X	
R344	RK3537	Chip R	ERJ2GEJ821X	
R345	RK3558	Chip R	ERJ2GEJ473X	
R346	RK3537	Chip R	ERJ2GEJ821X	
R347	NC			
R348	RK3552	Chip R	ERJ2GEJ153X	
R349	NC			
R350	RK3562	Chip R	ERJ2GEJ104X	
R351	RK3550	Chip R	ERJ2GEJ103X	
R352	NC			
R353	RK3546	Chip R	ERJ2GEJ472X	
R354	RK3550	Chip R	ERJ2GEJ103X	
R355	RK3550	Chip R	ERJ2GEJ103X	
R357	RK3501	Chip R	ERJ2GE0R00X	
R358	NC			
R359	NC			
R360	NC			
R361	NC			
R362	RK3536	Chip R	ERJ2GEJ681X	
R363	RK3558	Chip R	ERJ2GEJ473X	
R364	RK1018	Chip R	ERJ8GEYJ101V	
R365	RK3546	Chip R	ERJ2GEJ472X	
R366	RK3566	Chip R	ERJ2GEJ224X	
R367	RK3558	Chip R	ERJ2GEJ473X	
R368	RK3548	Chip R	ERJ2GEJ682X	
R369	RK3538	Chip R	ERJ2GEJ102X	
R370	RK3501	Chip R	ERJ2GE0R00X	
R371	RK3546	Chip R	ERJ2GEJ472X	
R372	RK3550	Chip R	ERJ2GEJ103X	
R373	RK3546	Chip R	ERJ2GEJ472X	
R374	RK3562	Chip R	ERJ2GEJ104X	
R375	RK3550	Chip R	ERJ2GEJ103X	
R376	RK3562	Chip R	ERJ2GEJ104X	
R377	RK3562	Chip R	ERJ2GEJ104X	
R378	RK3566	Chip R	ERJ2GEJ224X	
R379	RK3562	Chip R	ERJ2GEJ104X	
R380	RK3566	Chip R	ERJ2GEJ224X	
R381	RK3554	Chip R	ERJ2GEJ223X	
R382	NC			
R384	NC			
R385	NC			T
R385	RK3038	Chip R	MCR03EZHJ102	TFH, R
R385	RK3064	Chip R	MCR03EZHJ154	E, EUK
R386	NC			
R387	NC			
R388	RK3550	Chip R	ERJ2GEJ103X	
R392	RK3550	Chip R	ERJ2GEJ103X	
R393	RK3534	Chip R	ERJ2GEJ471X	
R394	RK3531	Chip R	ERJ2GEJ271X	
R395	RK3556	Chip R	ERJ2GEJ333X	
R396	RK3556	Chip R	ERJ2GEJ333X	
R398	RK3558	Chip R	ERJ2GEJ473X	TFH, R
R398	RK3570	Chip R	ERJ2GEJ474X	T, E, EUK
R401	RK3501	Chip R	ERJ2GE0R00X	
R402	RK3501	Chip R	ERJ2GE0R00X	
R403	RK3570	Chip R	ERJ2GEJ474X	
R404	RK3550	Chip R	ERJ2GEJ103X	
R405	RK3542	Chip R	ERJ2GEJ222X	
R406	RK3546	Chip R	ERJ2GEJ472X	
R407	RK3562	Chip R	ERJ2GEJ104X	
R408	RK3526	Chip R	ERJ2GEJ101X	
SW101	UU0041	Switch	EVQP4203M	
SW102	UU0041	Switch	EVQP4203M	
SW103	UU0041	Switch	EVQP4203M	
TC101	CT0050	Trimmer	TZY2Z100A001R00	
TH101	XS0052	Thermistor	NTCG104LH104JT1	
VR101	RH0233	Trimmer R	RH02B1C15X	
VR102	NC			
VR103	RH0225	Trimmer R	RH02B1CS3X	
VR104	RH0225	Trimmer R	RH02B1CS3X	
VR105	NC			
W101	MPCL07AA	Wire	#30P02-070-02	
W102	MACL07AA	Wire	#30A02-070-02	
W103	NC			EUK
W103	MACLH2GG	Wire	#30AH1-025-H1	T, E
X101	XQ0175	Crystal	SX2112 21.25MHDG0687	
X102	NC			
X103	XK0004	Discriminator	CDBLB450KCAY24-B0	
X104	XQ0184	Crystal	AT49 3.6864M	
	UP0541	PCB	DJ170 INTEGRATED	
	FM0265		HEAT SINK DJ170	
	TS0183	VCO CASE	VCO CASE	
	TZ0049		SILICON DUMPER	

Mechanical Unit

Model:DJ-V17

Ref. No.	Parts No.	Description	Parts Name	Version
	ADFV17	FRONT CASE ASSY	FRONT CASE ASSY	
	ADRV17	REAR CASE ASSY	REAR CASE ASSY	
	AF0018	SCREW	XQN2+C4FZ	
	AF0030	SCREW	XQN2+A6FN(58364-0001	
	AP0039	SCREW	PH P2+20 FE/3BBC	
	AX0004Z	SCREW	PT 3P 2X8 BBC AX0004	
	DG0046		LCD LIGHT	
	DP0181		LCD PANNEL DJV17	
	FG0392		WATERPROOF	
	FG0418		LCD RUBBER CONE	

Model:DJ-V17

Ref. No.	Parts No.	Description	Parts Name	Version
	FG0419		WATERPROOF RUBBER	
	FG0423		JACK CAP DJ170	
	FG0424		O RING (R COVER)	
	FG0426		MIC RUBBER	
	FP0254		REAR COVER	
	FP0255		ROCK LEVER	
	FP0264		BLIND SEAL	
	NK0081		VOL KNOB	
	SP0013		LECTRA #7800	
	ST0089		LCD HOLDER	
	TL0033		REFLECTIVE SHEET	
	YX0039		LCD TAPE DJS45	

Packing Unit

Model:DJ-V17

Ref. No.	Parts No.	Description	Parts Name	Version
	EA0141	ANTENNA	ANTENNA EA0141	T, E, EUK
	EA0142	ANTENNA	ANTENNA EA0142	TFH, R
	EG0062	BATTERY	EBP-65 P BAG	TFH, R
	EG0065	BATTERY	EBP-65A P BAG	T, E, EUK
	EDC146	ADAPTOR	ADAPTOR 120V	T
	EDC147	ADAPTOR	ADAPTOR 230V	E
	EDC148	ADAPTOR	ADAPTOR 230V (UK)	EUK
	PR0478		SERIAL SEAL	
	DS0446		NITTO MODEL PLATE(S)	
	PR0447		WARNING FCC (N)	T
	PR0452		FCC HOME USE	T
	HU0234		INNER DJ170	
	PS0520A	INSTRUCTION MANUAL	INSTRUCTION DJV17	
	PH0015		WARRANTY CEAT EXPO	T
	PK0110		CIRCUIT DIAGRAM V17	
	HK0637		INDIVIDUAL BOX V17	
	HP0031		PLA.BAG 5X100X200	
	BH0017	BELT CLIP	BELT CLIP	
	BB0009Y	HAND STRAP	HAND STRAP DJS41	
	AA0076		PH M3+6FE/B·ZN	
	HP0003		PLA.BAG 5X75X110	

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

PARTS LIST<DJ-V47>

MAIN Unit

Model:DJ-V47

Ref. No.	Parts No.	Description	Parts Name	Version
C101	CU3031	Chip C	C1608JB1H471KT-AS	
C102	CU3031	Chip C	C1608JB1H471KT-AS	
C103	CU3031	Chip C	C1608JB1H471KT-AS	
C104	CU3510	Chip C	GRP1552C1H9R0DZ01E	
C105	CU3511	Chip C	GRP1552C1H100JZ01E	
C106	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C107	CU3006	Chip C	C1608CH1H050CT-AS	
C108	CU3006	Chip C	C1608CH1H050CT-AS	
C109	CU3007	Chip C	C1608CH1H060DT-A	TA2
C109	CU3009	Chip C	C1608CH1H080DT-A	EUK
C110	CU3014	Chip C	C1608CH1H180JT-AS	TA1
C110	CU3010	Chip C	C1608CH1H090DT-A	TA2
C110	CU3012	Chip C	C1608CH1H120JT-AS	T, E, EUK
C111	CU3013	Chip C	C1608CH1H150JT-AS	
C112	CU3011	Chip C	C1608CH1H100DT-AS	
C113	CU3011	Chip C	C1608CH1H100DT-AS	
C114	CU3015	Chip C	C1608CH1H220JT-AS	
C115	CU3512	Chip C	GRP1552C1H120JZ01E	
C116	CU3531	Chip C	GRP155B11H471KD01E	
C117	NC			
C118	CU3501	Chip C	GRP1554C1HR50CZ01E	T, E, EUK, TA2
C118	CU3502	Chip C	GRP1554C1H1R0CZ01E	TA1
C119	CU3501	Chip C	GRP1554C1HR50CZ01E	T, E, EUK, TA2
C119	CU3502	Chip C	GRP1554C1H1R0CZ01E	TA1
C120	NC			
C121	NC			
C122	CU3547	Chip C	GRP155B11C103KA01E	
C123	NC			
C124	CU3005	Chip C	C1608CH1H040CT-AS	
C125	CU3006	Chip C	C1608CH1H050CT-AS	
C126	CU3006	Chip C	C1608CH1H050CT-AS	
C127	CU3006	Chip C	C1608CH1H050CT-AS	
C128	CU3554	Chip C	GRP155B11A104KA01E	
C129	CU3531	Chip C	GRP155B11H471KD01E	
C130	CU3531	Chip C	GRP155B11H471KD01E	
C131	NC			
C132	CU3547	Chip C	GRP155B11C103KA01E	
C133	CU3531	Chip C	GRP155B11H471KD01E	
C134	CU3547	Chip C	GRP155B11C103KA01E	
C135	CU3531	Chip C	GRP155B11H471KD01E	
C136	CU3531	Chip C	GRP155B11H471KD01E	
C137	CU3511	Chip C	GRP1552C1H100JZ01E	
C138	NC			
C139	NC			
C140	NC			
C141	CU3513	Chip C	GRP1552C1H150JZ01E	
C142	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C143	CU3531	Chip C	GRP155B11H471KD01E	
C144	CU3531	Chip C	GRP155B11H471KD01E	
C145	CU3531	Chip C	GRP155B11H471KD01E	
C146	CU3531	Chip C	GRP155B11H471KD01E	
C147	NC			
C148	CU3507	Chip C	GRP1552C1H6R0DZ01E	
C149	CU3531	Chip C	GRP155B11H471KD01E	
C150	NC			T, E, EUK, TA2
C150	CU3501	Chip C	GRP1554C1HR50CZ01E	TA1
C151	CU3501	Chip C	GRP1554C1HR50CZ01E	
C152	CU3515	Chip C	GRP1552C1H220JZ01E	TA2
C152	CU3516	Chip C	GRP1552C1H270JZ01E	T, E, EUK
C152	CU3519	Chip C	GRP1552C1H470JZ01E	TA1
C153	CU3507	Chip C	GRP1552C1H6R0DZ01E	
C154	CU3523	Chip C	GRP1552C1H101JD01E	
C155	CU3559	Chip C	GRM155B30J105KE18D	
C156	CU3511	Chip C	GRP1552C1H100JZ01E	
C157	CU3501	Chip C	GRP1554C1HR50CZ01E	
C158	NC			
C159	CU3535	Chip C	GRP155B11H102KA01E	
C160	CU3511	Chip C	GRP1552C1H100JZ01E	
C161	CU3504	Chip C	GRP1553C1H3R0CZ01E	
C162	CU3527	Chip C	GRP1552C1E221JD01E	
C163	CS0426	Chip Tantalum	F931A106MAA	
C164	CS0426	Chip Tantalum	F931A106MAA	
C165	CU3554	Chip C	GRP155B11A104KA01E	
C166	CU3531	Chip C	GRP155B11H471KD01E	
C167	CU3547	Chip C	GRP155B11C103KA01E	
C168	CU3531	Chip C	GRP155B11H471KD01E	
C169	CU3531	Chip C	GRP155B11H471KD01E	
C170	NC			
C171	CU3515	Chip C	GRP1552C1H220JZ01E	
C172	NC			
C173	CU3531	Chip C	GRP155B11H471KD01E	
C174	CS0396	Chip Tantalum	TMCP1D104MTR	
C176	NC			
C177	CU3505	Chip C	GRP1552C1H4R0CZ01E	
C178	CU3503	Chip C	GRP1554C1H2R0CZ01E	
C179	CU3133	Chip C	TMK107BJ105KA-T	
C180	CU3531	Chip C	GRP155B11H471KD01E	
C181	CU3531	Chip C	GRP155B11H471KD01E	
C182	CU3133	Chip C	TMK107BJ105KA-T	
C183	CS0398	Chip Tantalum	TMCP0J225MTR	
C184	NC			
C185	CU3531	Chip C	GRP155B11H471KD01E	
C186	CU3554	Chip C	GRP155B11A104KA01E	
C187	CU3523	Chip C	GRP1552C1H101JD01E	
C188	CU3531	Chip C	GRP155B11H471KD01E	
C189	CU3531	Chip C	GRP155B11H471KD01E	
C190	CU3505	Chip C	GRP1552C1H4R0CZ01E	
C191	CU3505	Chip C	GRP1552C1H4R0CZ01E	
C192	CU3503	Chip C	GRP1554C1H2R0CZ01E	T, E, EUK, TA2
C192	CU3505	Chip C	GRP1552C1H4R0CZ01E	TA1
C193	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C194	CU3531	Chip C	GRP155B11H471KD01E	
C195	CU3506	Chip C	GRP1552C1H5R0CZ01E	T, E, EUK, TA2
C195	CU3508	Chip C	GRP1552C1H7R0DZ01E	TA1
C196	CU3559	Chip C	GRM155B30J105KE18D	
C197	CU3520	Chip C	GRP1552C1H560JD01E	
C198	NC			TA1
C198	CU3502	Chip C	GRP1554C1H1R0CZ01E	T, E, EUK, TA2
C199	CU3531	Chip C	GRP155B11H471KD01E	
C200	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C201	CU3502	Chip C	GRP1554C1H1R0CZ01E	
C202	CU3524	Chip C	GRP1552C1H121JD01E	
C203	CU3505	Chip C	GRP1552C1H4R0CZ01E	
C204	CU3531	Chip C	GRP155B11H471KD01E	

Ref. No.	Parts No.	Description	Parts Name	Version
C205	CU3535	Chip C	GRP155B11H102KA01E	
C206	CU3531	Chip C	GRP155B11H471KD01E	
C207	CU3547	Chip C	GRP155B11C103KA01E	
C208	CU3523	Chip C	GRP1552C1H101JD01E	
C209	CU3511	Chip C	GRP1552C1H100JZ01E	
C210	CU3547	Chip C	GRP155B11C103KA01E	
C211	CU3547	Chip C	GRP155B11C103KA01E	
C212	CU3505	Chip C	GRP1552C1H4R0CZ01E	T, E, EUK, TA2
C212	CU3515	Chip C	GRP1552C1H220JZ01E	TA1
C213	CU3531	Chip C	GRP155B11H471KD01E	
C214	CU3531	Chip C	GRP155B11H471KD01E	
C215	CU3512	Chip C	GRP1552C1H120JZ01E	
C216	CU3513	Chip C	GRP1552C1H150JZ01E	T, E, EUK, TA2
C216	CU3515	Chip C	GRP1552C1H220JZ01E	TA1
C217	CU3531	Chip C	GRP155B11H471KD01E	
C218	CU3547	Chip C	GRP155B11C103KA01E	
C219	CU3513	Chip C	GRP1552C1H150JZ01E	
C220	CU3513	Chip C	GRP1552C1H150JZ01E	T, E, EUK, TA2
C220	CU3514	Chip C	GRP1552C1H180JZ01E	TA1
C221	CU3501	Chip C	GRP1554C1HR50CZ01E	
C222	CU3506	Chip C	GRP1552C1H5R0CZ01E	
C223	CU3501	Chip C	GRP1554C1HR50CZ01E	
C224	CU3551	Chip C	GRP155B11C223KD01E	
C225	CU3531	Chip C	GRP155B11H471KD01E	
C226	CU3133	Chip C	TMK107BJ105KA-T	
C227	CU3536	Chip C	GRM36B122K50PT	
C228	CU3547	Chip C	GRP155B11C103KA01E	
C229	CU3547	Chip C	GRP155B11C103KA01E	
C230	CU3554	Chip C	GRP155B11A104KA01E	
C231	CU3554	Chip C	GRP155B11A104KA01E	
C232	CU3522	Chip C	GRP1552C1H820JD01E	
C233	CU3535	Chip C	GRP155B11H102KA01E	
C234	CU3554	Chip C	GRP155B11A104KA01E	
C235	CU3554	Chip C	GRP155B11A104KA01E	
C236	CU3523	Chip C	GRP1552C1H101JD01E	
C237	CU3554	Chip C	GRP155B11A104KA01E	
C238	CU3535	Chip C	GRP155B11H102KA01E	
C239	CU3531	Chip C	GRP155B11H471KD01E	
C240	NC			
C241	CU3554	Chip C	GRP155B11A104KA01E	
C242	CU3547	Chip C	GRP155B11C103KA01E	
C243	CU3531	Chip C	GRP155B11H471KD01E	
C244	CU3554	Chip C	GRP155B11A104KA01E	
C245	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C246	CU3559	Chip C	GRM155B30J105KE18D	
C247	CU3531	Chip C	GRP155B11H471KD01E	
C248	CU3535	Chip C	GRP155B11H102KA01E	
C249	CU3547	Chip C	GRP155B11C103KA01E	
C250	CU3531	Chip C	GRP155B11H471KD01E	
C251	CU3547	Chip C	GRP155B11C103KA01E	
C252	CU3519	Chip C	GRP1552C1H470JZ01E	
C253	CU3535	Chip C	GRP155B11H102KA01E	
C254	CU3535	Chip C	GRP155B11H102KA01E	
C255	CU3553	Chip C	GRP155B11A473KA01E	
C256	CU3554	Chip C	GRP155B11A104KA01E	
C257	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C258	CU3554	Chip C	GRP155B11A104KA01E	
C259	CU3531	Chip C	GRP155B11H471KD01E	
C260	CU3527	Chip C	GRP1552C1E221JD01E	
C261	CU3522	Chip C	GRP1552C1H820JD01E	

Ref. No.	Parts No.	Description	Parts Name	Version
C262	CU3554	Chip C	GRP155B11A104KA01E	
C263	CU3531	Chip C	GRP155B11H471KD01E	
C264	CU3554	Chip C	GRP155B11A104KA01E	
C265	CU3531	Chip C	GRP155B11H471KD01E	
C266	CU3554	Chip C	GRP155B11A104KA01E	
C267	CU3527	Chip C	GRP1552C1E221JD01E	
C268	CU3535	Chip C	GRP155B11H102KA01E	
C269	CU3547	Chip C	GRP155B11C103KA01E	
C270	CU3535	Chip C	GRP155B11H102KA01E	
C271	CU3531	Chip C	GRP155B11H471KD01E	
C272	CU3559	Chip C	GRM155B30J105KE18D	
C273	CU3513	Chip C	GRP1552C1H150JZ01E	
C274	CU3514	Chip C	GRP1552C1H180JZ01E	
C275	CU3543	Chip C	GRP155B11E472KD01E	
C276	CU3531	Chip C	GRP155B11H471KD01E	
C277	CU3133	Chip C	TMK107BJ105KA-T	
C278	CU3554	Chip C	GRP155B11A104KA01E	
C279	CS0439	Chip Tantalum	TMCMA0J476MTRF	
C280	CU3554	Chip C	GRP155B11A104KA01E	
C281	CE0437	Electrolytic C	10CE150BSS	
C282	CU3554	Chip C	GRP155B11A104KA01E	
C283	CU3551	Chip C	GRP155B11C223KD01E	
C284	CU3551	Chip C	GRP155B11C223KD01E	
C285	CU3535	Chip C	GRP155B11H102KA01E	
C286	CU3535	Chip C	GRP155B11H102KA01E	
C287	CU3554	Chip C	GRP155B11A104KA01E	
C288	CU3559	Chip C	GRM155B30J105KE18D	
C289	CS0441	Chip Tantalum	TMCMA0J226MTRF	
C290	CS0397	Chip Tantalum	TMCP1C105MTR	
C291	CU3531	Chip C	GRP155B11H471KD01E	
C292	CS0440	Chip Tantalum	TMCMB1C476MTRF	
C293	CU3559	Chip C	GRM155B30J105KE18D	
C294	CU3554	Chip C	GRP155B11A104KA01E	
C295	CU3547	Chip C	GRP155B11C103KA01E	
C296	CU3554	Chip C	GRP155B11A104KA01E	
C297	CU3553	Chip C	GRP155B11A473KA01E	
C298	CU3535	Chip C	GRP155B11H102KA01E	
C299	CU3531	Chip C	GRP155B11H471KD01E	
C300	NC			
C301	NC			
C302	CU3531	Chip C	GRP155B11H471KD01E	
C303	CU3551	Chip C	GRP155B11C223KD01E	
C304	CU3552	Chip C	GRP155B11A333KA01E	
C305	CU3554	Chip C	GRP155B11A104KA01E	
C306	CU3531	Chip C	GRP155B11H471KD01E	
C307	CS0439	Chip Tantalum	TMCMA0J476MTRF	
C308	CU3531	Chip C	GRP155B11H471KD01E	
C309	CU3531	Chip C	GRP155B11H471KD01E	
C310	CU3531	Chip C	GRP155B11H471KD01E	
C311	CU3531	Chip C	GRP155B11H471KD01E	
C312	CS0426	Chip Tantalum	F931A106MAA	
C313	CU3531	Chip C	GRP155B11H471KD01E	
C314	CU3547	Chip C	GRP155B11C103KA01E	
C315	CU3547	Chip C	GRP155B11C103KA01E	
C316	CU3535	Chip C	GRP155B11H102KA01E	
C317	CU3531	Chip C	GRP155B11H471KD01E	
C318	CU3531	Chip C	GRP155B11H471KD01E	
C319	CU3531	Chip C	GRP155B11H471KD01E	
C320	CU3554	Chip C	GRP155B11A104KA01E	
C321	CS0439	Chip Tantalum	TMCMA0J476MTRF	

Ref. No.	Parts No.	Description	Parts Name	Version
C322	CU3554	Chip C	GRP155B11A104KA01E	
C323	CU3547	Chip C	GRP155B11C103KA01E	
C324	CU3547	Chip C	GRP155B11C103KA01E	
C325	CU3531	Chip C	GRP155B11H471KD01E	
C326	CE0436	Electrolytic C	16CE47BSS	
C327	CU3133	Chip C	TMK107BJ105KA-T	
C328	CU3531	Chip C	GRP155B11H471KD01E	
C331	CU3535	Chip C	GRP155B11H102KA01E	
C332	CU3554	Chip C	GRP155B11A104KA01E	
C334	NC			TA2
C334	CU3502	Chip C	GRP1554C1H1R0CZ01E	T, E, EUK
C334	CU3504	Chip C	GRP1553C1H3R0CZ01E	TA1
C336	CS0396	Chip Tantalum	TMCP1D104MTR	
C347	CU3531	Chip C	GRP155B11H471KD01E	
C349	CU3559	Chip C	GRM155B30J105KE18D	
C350	CU3559	Chip C	GRM155B30J105KE18D	
C351	CU3133	Chip C	TMK107BJ105KA-T	
C352	CU3531	Chip C	GRP155B11H471KD01E	
C353	CU3531	Chip C	GRP155B11H471KD01E	
C354	CU3531	Chip C	GRP155B11H471KD01E	
C355	CS0398	Chip Tantalum	TMCP0J225MTR	
C356	CU3547	Chip C	GRP155B11C103KA01E	
C357	NC			
C358	NC			
C359	CU3531	Chip C	GRP155B11H471KD01E	
C360	CU3531	Chip C	GRP155B11H471KD01E	
C362	CU3531	Chip C	GRP155B11H471KD01E	
C363	CU3531	Chip C	GRP155B11H471KD01E	
C372	CU3531	Chip C	GRP155B11H471KD01E	
CN101	NC			
CN102	NC			
CN103	UE0506	Connector	AXK520135P	
D101	XD0339	Diode	1SV308(TPH3)	
D102	XD0419	Diode	1SS400TE61	
D103	XD0339	Diode	1SV308(TPH3)	
D104	NC			
D105	XD0251	Diode	MA741WA-(TX)	
D106	NC			
D107	NC			
D108	XD0422	Diode	HSC277TRF-E	
D109	XD0403	Diode	1SV314(TPH3,F)	
D110	XD0403	Diode	1SV314(TPH3,F)	
D111	NC			
D112	XD0339	Diode	1SV308(TPH3)	
D113	XD0339	Diode	1SV308(TPH3)	
D114	XD0339	Diode	1SV308(TPH3)	
D115	XD0403	Diode	1SV314(TPH3,F)	
D116	XD0403	Diode	1SV314(TPH3,F)	
D117	XD0403	Diode	1SV314(TPH3,F)	
D118	XD0403	Diode	1SV314(TPH3,F)	
D119	XL0097	Chip LED	SML-521MUWT86	
D120	XD0338	Diode	1SS362(TE85L)	
D121	XD0419	Diode	1SS400TE61	
D122	XD0424	Diode	S3JB-T	
D123	XD0420	Diode	FA3J3STP	
D124	XD0338	Diode	1SS362(TE85L)	
D125	XD0420	Diode	FA3J3STP	
D126	XL0036	Chip LED	SML-310MTT86	
D127	XL0036	Chip LED	SML-310MTT86	
D128	XL0036	Chip LED	SML-310MTT86	

Ref. No.	Parts No.	Description	Parts Name	Version
D129	XL0036	Chip LED	SML-310MTT86	
D130	XD0416	Diode	1SS423(TE85L,F)	
D131	XL0036	Chip LED	SML-310MTT86	
D132	XL0036	Chip LED	SML-310MTT86	
D133	XD0418	Diode	RB521S-30TE61	
D134	XD0418	Diode	RB521S-30TE61	
D135	XD0377	Diode	MAZS0270HL	
FL101	XF0073	MCF	38M15B5F	
FL102	NC			
FL103	XC0060	Filter	ALFYM450F=K	
IC101	XA1107	IC	MB15E07SR	
IC102	XA1106	IC	LM2902PWR	
IC103	XA0404	IC	TA31136FN(EL)	
IC104	XA1120	IC	S80845CLNB-B66-T2G	
IC105	XA1117	IC	S24CS64A01-J8T1G	
IC106	XA0210	IC	NJM2070M T1	
IC107	XA1118	IC	M62429FP/CF0J	
IC108	XA1106	IC	LM2902PWR	
IC109	XA1121	IC	M38268MCA-076GP#UO	
IC110	XA1119	IC	XC6202P502MR	
JK101	UJ0060	Jack	HSJ1594-010150	
JK102	UJ0061	Jack	LD-0208-1.3	
L101	QS401405	Coil	0.40-1.4-5TL	
L102	QS401405	Coil	0.40-1.4-5TL	
L103	QS401405	Coil	0.40-1.4-5TL	
L104	QS4011Z4	Coil	E2-0.4-1.1-4TL	
L106	QC0749	Chip Inductor	C1608CB1N5K	
L107	QC0801	Chip Inductor	MLG1005S12NJT	
L108	QS30200D	Coil	0.30-2.0-13TL	
L109	QC0804	Chip Inductor	MLG1005S22NJT	
L110	QC0763	Chip Inductor	C1608CB68NJ	
L111	QC0803	Chip Inductor	MLG1005S18NJT	
L112	QC0773	Chip Inductor	C1608CBR47J	
L113	QS501405	Coil	E2-0.5-1.4-5TL	
L114	QB0057	Chip Inductor	MPZ1608S101AT	
L115	QB0057	Chip Inductor	MPZ1608S101AT	
L116	QC0804	Chip Inductor	MLG1005S22NJT	
L117	QC0860	Chip Inductor	C2012H10NH	
L118	QB0057	Chip Inductor	MPZ1608S101AT	
L120	QC0812	Chip Inductor	MLG1005SR10JT	
L121	QC0803	Chip Inductor	MLG1005S18NJT	
L122	QC0817	Chip Inductor	MLG1005SR27JT	
L123	QC0766	Chip Inductor	C1608CBR12J	
L124	QC0768	Chip Inductor	C1608CBR18J	
L125	QC0757	Chip Inductor	C1608CB22NJ	
L126	QC0755	Chip Inductor	C1608CB15NJ	
L127	QC0768	Chip Inductor	C1608CBR18J	
L128	QC0757	Chip Inductor	C1608CB22NJ	
L129	QC0755	Chip Inductor	C1608CB15NJ	
L130	QC0820	Chip Inductor	LB2518T151K	
L131	QC0842	Chip Inductor	LB2518T221K	
L136	QC0812	Chip Inductor	MLG1005SR10JT	
L137	QC0812	Chip Inductor	MLG1005SR10JT	
LCD101	EL0059	LCD	LCD DJ170	
MIC101	EY0017	Microphone	OB-27P44	
Q101	XT0210	Transistor	2SC6026MFV-GR	
Q102	XE0071	FET	2SK3476(TE12L,Q)	
Q103	XE0070	FET	2SK3475(TE12L,F)	
Q104	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q105	XT0180	Transistor	2SC5066FT-Y (TE85L)	

Ref. No.	Parts No.	Description	Parts Name	Version
Q106	NC			
Q107	XT0213	Transistor	2SC5659T2L	
Q108	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q109	NC			
Q110	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q111	XT0214	Transistor	HN2C01FE-GR(T5L,F)	
Q112	XU0210	Transistor	RN1107MFV(TPL3)	
Q113	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q114	XE0053	FET	3SK293 TE85L	
Q115	XT0213	Transistor	2SC5659T2L	
Q116	XE0053	FET	3SK293 TE85L	
Q117	XU0210	Transistor	RN1107MFV(TPL3)	
Q118	XT0180	Transistor	2SC5066FT-Y (TE85L)	
Q119	XT0213	Transistor	2SC5659T2L	
Q120	XT0210	Transistor	2SC6026MFV-GR	
Q121	XU0212	Transistor	RN2115MFV(TPL3)	
Q122	XU0210	Transistor	RN1107MFV(TPL3)	
Q123	NC			
Q124	XU0220	Transistor	RN2111MFV(TLP3)	
Q125	XU0210	Transistor	RN1107MFV(TPL3)	
Q126	XU0210	Transistor	RN1107MFV(TPL3)	
Q127	XU0220	Transistor	RN2111MFV(TLP3)	
Q128	XT0210	Transistor	2SC6026MFV-GR	
Q129	XT0210	Transistor	2SC6026MFV-GR	
Q130	XT0170	Transistor	2SB766A-(TX)R	
Q131	XT0210	Transistor	2SC6026MFV-GR	
Q132	XT0170	Transistor	2SB766A-(TX)R	
Q133	XE0069	FET	SSM3K15FV(TPL3,Z)	
Q134	XU0210	Transistor	RN1107MFV(TPL3)	
Q135	XT0214	Transistor	HN2C01FE-GR(T5L,F)	
Q136	XT0170	Transistor	2SB766A-(TX)R	
Q137	XT0212	Transistor	2SA1955FV-A(TPL3)	
Q138	XT0212	Transistor	2SA1955FV-A(TPL3)	
Q139	XT0214	Transistor	HN2C01FE-GR(T5L,F)	
Q140	XT0212	Transistor	2SA1955FV-A(TPL3)	
Q141	XT0210	Transistor	2SC6026MFV-GR	
Q142	XU0213	Transistor	RN1111MFV(TPL3),F	
Q143	XU0213	Transistor	RN1111MFV(TPL3),F	
Q144	XU0210	Transistor	RN1107MFV(TPL3)	
Q145	XU0211	Transistor	RN2107MFV(TPL3)	
Q146	XU0213	Transistor	RN1111MFV(TPL3),F	
Q147	XE0069	FET	SSM3K15FV(TPL3,Z)	
Q148	XE0069	FET	SSM3K15FV(TPL3,Z)	
Q149	XT0210	Transistor	2SC6026MFV-GR	
Q152	XU0211	Transistor	RN2107MFV(TPL3)	
Q153	XU0211	Transistor	RN2107MFV(TPL3)	
R101	RK3534	Chip R	ERJ2GEJ471X	
R102	RK3545	Chip R	ERJ2GEJ392X	
R103	RK3550	Chip R	ERJ2GEJ103X	
R104	RK3501	Chip R	ERJ2GE0R00X	
R105	NC			
R106	NC			
R107	RK3526	Chip R	ERJ2GEJ101X	
R108	RK3534	Chip R	ERJ2GEJ471X	
R109	RK3030	Chip R	MCR03EZHJ221	
R111	RK3542	Chip R	ERJ2GEJ222X	
R112	RK3556	Chip R	ERJ2GEJ333X	
R113	RK3548	Chip R	ERJ2GEJ682X	
R114	NC			
R115	NC			

Ref. No.	Parts No.	Description	Parts Name	Version
R116	RK3022	Chip R	MCR03EZHJ470	
R117	RK3530	Chip R	ERJ2GEJ221X	
R118	RK3526	Chip R	ERJ2GEJ101X	
R119	RK3566	Chip R	ERJ2GEJ224X	
R120	NC			
R121	RK3538	Chip R	ERJ2GEJ102X	
R122	RK3542	Chip R	ERJ2GEJ222X	
R123	RK3522	Chip R	ERJ2GEJ470X	
R124	RK3526	Chip R	ERJ2GEJ101X	
R125	NC			
R126	RK3562	Chip R	ERJ2GEJ104X	
R127	RK3562	Chip R	ERJ2GEJ104X	
R128	RK3550	Chip R	ERJ2GEJ103X	
R129	RK3574	Chip R	ERJ2GEJ105X	
R130	NC			
R131	RK3552	Chip R	ERJ2GEJ153X	
R132	RK3530	Chip R	ERJ2GEJ221X	
R133	RK3550	Chip R	ERJ2GEJ103X	
R136	RK3538	Chip R	ERJ2GEJ102X	
R137	RK3553	Chip R	ERJ2GEJ183X	TA2
R137	RK3554	Chip R	ERJ2GEJ223X	T, E, EUK
R137	RK3556	Chip R	ERJ2GEJ333X	TA1
R138	RK3562	Chip R	ERJ2GEJ104X	
R139	RK3550	Chip R	ERJ2GEJ103X	
R140	RK3501	Chip R	ERJ2GE0R00X	
R141	RK3555	Chip R	ERJ2GEJ273X	
R142	RK3550	Chip R	ERJ2GEJ103X	
R143	RK3546	Chip R	ERJ2GEJ472X	
R144	RK3501	Chip R	ERJ2GE0R00X	
R145	RK3550	Chip R	ERJ2GEJ103X	
R146	RK3537	Chip R	ERJ2GEJ821X	
R147	RK3526	Chip R	ERJ2GEJ101X	
R148	RK3542	Chip R	ERJ2GEJ222X	
R149	RK3532	Chip R	ERJ2GEJ331X	
R150	RK3567	Chip R	ERJ2GEJ274X	
R151	NC			
R152	RK3542	Chip R	ERJ2GEJ222X	T, E, EUK, TA2
R152	RK3543	Chip R	ERJ2GEJ272X	TA1
R154	RK3570	Chip R	ERJ2GEJ474X	
R155	RK3542	Chip R	ERJ2GEJ222X	
R156	RK3538	Chip R	ERJ2GEJ102X	
R157	RK3550	Chip R	ERJ2GEJ103X	
R159	RK3539	Chip R	ERJ2GEJ122X	
R161	RK3538	Chip R	ERJ2GEJ102X	
R162	RK3564	Chip R	ERJ2GEJ154X	
R163	RK3522	Chip R	ERJ2GEJ470X	
R164	RK3550	Chip R	ERJ2GEJ103X	
R165	RK3544	Chip R	ERJ2GEJ332X	
R166	RK3526	Chip R	ERJ2GEJ101X	
R167	RK3542	Chip R	ERJ2GEJ222X	
R168	NC			
R169	RK3550	Chip R	ERJ2GEJ103X	
R170	RK3530	Chip R	ERJ2GEJ221X	
R171	RK3526	Chip R	ERJ2GEJ101X	
R172	RK3501	Chip R	ERJ2GE0R00X	
R173	RK3564	Chip R	ERJ2GEJ154X	
R174	RK3530	Chip R	ERJ2GEJ221X	
R175	RK3550	Chip R	ERJ2GEJ103X	
R176	RK3570	Chip R	ERJ2GEJ474X	
R177	RK3562	Chip R	ERJ2GEJ104X	

Ref. No.	Parts No.	Description	Parts Name	Version
R178	RK3550	Chip R	ERJ2GEJ103X	
R179	RK3538	Chip R	ERJ2GEJ102X	
R180	RK3501	Chip R	ERJ2GE0R00X	
R181	RK3550	Chip R	ERJ2GEJ103X	
R182	RK3566	Chip R	ERJ2GEJ224X	
R183	NC			
R184	NC			
R185	RK3562	Chip R	ERJ2GEJ104X	
R186	RK3550	Chip R	ERJ2GEJ103X	
R187	RK3526	Chip R	ERJ2GEJ101X	
R188	RK3538	Chip R	ERJ2GEJ102X	
R189	RK3538	Chip R	ERJ2GEJ102X	
R190	RK3530	Chip R	ERJ2GEJ221X	
R191	RK3550	Chip R	ERJ2GEJ103X	
R192	RK3558	Chip R	ERJ2GEJ473X	
R193	RK3562	Chip R	ERJ2GEJ104X	
R194	RK3522	Chip R	ERJ2GEJ470X	
R195	RK3558	Chip R	ERJ2GEJ473X	
R196	RK3558	Chip R	ERJ2GEJ473X	
R197	RK3574	Chip R	ERJ2GEJ105X	
R198	RK3574	Chip R	ERJ2GEJ105X	
R199	RK3555	Chip R	ERJ2GEJ273X	
R200	RK3560	Chip R	ERJ2GEJ683X	
R201	RK3522	Chip R	ERJ2GEJ470X	
R202	RK3538	Chip R	ERJ2GEJ102X	
R203	RK3566	Chip R	ERJ2GEJ224X	
R204	RK3574	Chip R	ERJ2GEJ105X	
R205	RK3574	Chip R	ERJ2GEJ105X	
R206	RK3558	Chip R	ERJ2GEJ473X	
R207	RK3556	Chip R	ERJ2GEJ333X	
R208	NC			
R209	RK3574	Chip R	ERJ2GEJ105X	
R210	RK3522	Chip R	ERJ2GEJ470X	
R211	RK3558	Chip R	ERJ2GEJ473X	
R212	RK3550	Chip R	ERJ2GEJ103X	
R213	RK3558	Chip R	ERJ2GEJ473X	
R214	RK3564	Chip R	ERJ2GEJ154X	
R215	RK3561	Chip R	ERJ2GEJ823X	
R216	RK3538	Chip R	ERJ2GEJ102X	
R218	RK3558	Chip R	ERJ2GEJ473X	
R219	RK3564	Chip R	ERJ2GEJ154X	
R220	RK3553	Chip R	ERJ2GEJ183X	
R221	RK3548	Chip R	ERJ2GEJ682X	
R222	RK3558	Chip R	ERJ2GEJ473X	
R223	RK3550	Chip R	ERJ2GEJ103X	
R224	RK3550	Chip R	ERJ2GEJ103X	
R225	RK3554	Chip R	ERJ2GEJ223X	
R226	RK3554	Chip R	ERJ2GEJ223X	
R227	RK3559	Chip R	ERJ2GEJ563X	
R228	RK3550	Chip R	ERJ2GEJ103X	
R229	RK3550	Chip R	ERJ2GEJ103X	
R230	RK3567	Chip R	ERJ2GEJ274X	
R231	RK3538	Chip R	ERJ2GEJ102X	
R232	RK3566	Chip R	ERJ2GEJ224X	
R234	RK3550	Chip R	ERJ2GEJ103X	
R235	RK3562	Chip R	ERJ2GEJ104X	
R236	RK3562	Chip R	ERJ2GEJ104X	
R237	RK3522	Chip R	ERJ2GEJ470X	
R238	RK3550	Chip R	ERJ2GEJ103X	
R239	RK3567	Chip R	ERJ2GEJ274X	

Ref. No.	Parts No.	Description	Parts Name	Version
R240	RK3562	Chip R	ERJ2GEJ104X	
R242	RK3501	Chip R	ERJ2GE0R00X	
R243	RK3550	Chip R	ERJ2GEJ103X	
R244	RK3564	Chip R	ERJ2GEJ154X	
R245	RK3544	Chip R	ERJ2GEJ332X	
R246	RK3562	Chip R	ERJ2GEJ104X	
R247	RK3559	Chip R	ERJ2GEJ563X	
R248	RK3538	Chip R	ERJ2GEJ102X	
R249	RK3566	Chip R	ERJ2GEJ224X	
R250	RK3550	Chip R	ERJ2GEJ103X	
R251	RK3562	Chip R	ERJ2GEJ104X	
R252	RK3561	Chip R	ERJ2GEJ823X	
R253	RK3566	Chip R	ERJ2GEJ224X	
R254	RK3550	Chip R	ERJ2GEJ103X	
R255	RK3563	Chip R	ERJ2GEJ124X	
R256	RK3562	Chip R	ERJ2GEJ104X	
R257	RK3538	Chip R	ERJ2GEJ102X	
R258	RK3574	Chip R	ERJ2GEJ105X	
R259	RK3566	Chip R	ERJ2GEJ224X	
R260	RK3553	Chip R	ERJ2GEJ183X	
R261	RK3574	Chip R	ERJ2GEJ105X	
R262	RK3562	Chip R	ERJ2GEJ104X	
R263	RK3562	Chip R	ERJ2GEJ104X	
R264	RK3558	Chip R	ERJ2GEJ473X	
R265	RK3536	Chip R	ERJ2GEJ681X	
R266	RK3518	Chip R	ERJ2GEJ220X	
R267	NC			
R269	RK3532	Chip R	ERJ2GEJ331X	
R270	RK3560	Chip R	ERJ2GEJ683X	
R272	RK3556	Chip R	ERJ2GEJ333X	
R273	RK3566	Chip R	ERJ2GEJ224X	
R274	RK3544	Chip R	ERJ2GEJ332X	
R275	RK3566	Chip R	ERJ2GEJ224X	
R276	RK3560	Chip R	ERJ2GEJ683X	
R277	RK3552	Chip R	ERJ2GEJ153X	
R278	RK3562	Chip R	ERJ2GEJ104X	
R279	RK3558	Chip R	ERJ2GEJ473X	
R280	RK3556	Chip R	ERJ2GEJ333X	
R281	RK3017	Chip R	MCR03EZHJ180	
R282	RK3514	Chip R	ERJ2GEJ100X	
R283	RK3554	Chip R	ERJ2GEJ223X	
R284	RK3561	Chip R	ERJ2GEJ823X	
R285	RK3550	Chip R	ERJ2GEJ103X	
R286	RK3570	Chip R	ERJ2GEJ474X	
R287	RK3550	Chip R	ERJ2GEJ103X	
R288	RK3550	Chip R	ERJ2GEJ103X	
R289	RK3565	Chip R	ERJ2GEJ184X	
R290	RK3017	Chip R	MCR03EZHJ180	
R291	RK3551	Chip R	ERJ2GEJ123X	
R292	RK3569	Chip R	ERJ2GEJ394X	
R293	RK3532	Chip R	ERJ2GEJ331X	
R294	RK3562	Chip R	ERJ2GEJ104X	
R295	RK3538	Chip R	ERJ2GEJ102X	
R296	RK3530	Chip R	ERJ2GEJ221X	
R297	RK3546	Chip R	ERJ2GEJ472X	
R298	RK3549	Chip R	ERJ2GEJ822X	
R299	RK3544	Chip R	ERJ2GEJ332X	
R300	RK3538	Chip R	ERJ2GEJ102X	
R301	RK3501	Chip R	ERJ2GE0R00X	
R302	RK3538	Chip R	ERJ2GEJ102X	

Ref. No.	Parts No.	Description	Parts Name	Version
R303	RK3550	Chip R	ERJ2GEJ103X	
R304	RK3546	Chip R	ERJ2GEJ472X	
R305	RK3550	Chip R	ERJ2GEJ103X	
R306	RK3550	Chip R	ERJ2GEJ103X	
R308	RK3574	Chip R	ERJ2GEJ105X	
R309	RK3574	Chip R	ERJ2GEJ105X	
R310	RK3550	Chip R	ERJ2GEJ103X	
R311	RK3550	Chip R	ERJ2GEJ103X	
R312	RK3570	Chip R	ERJ2GEJ474X	
R313	RK3550	Chip R	ERJ2GEJ103X	
R314	RK3554	Chip R	ERJ2GEJ223X	
R315	RK3542	Chip R	ERJ2GEJ222X	
R316	RK3550	Chip R	ERJ2GEJ103X	
R317	RK3570	Chip R	ERJ2GEJ474X	
R318	RK3550	Chip R	ERJ2GEJ103X	
R319	RK3554	Chip R	ERJ2GEJ223X	
R320	RK3574	Chip R	ERJ2GEJ105X	
R321	RK3550	Chip R	ERJ2GEJ103X	
R322	RK3568	Chip R	ERJ2GEJ334X	
R323	RK3550	Chip R	ERJ2GEJ103X	
R324	RK3548	Chip R	ERJ2GEJ682X	
R325	RK3559	Chip R	ERJ2GEJ563X	
R326	RK3559	Chip R	ERJ2GEJ563X	
R327	RK3550	Chip R	ERJ2GEJ103X	
R328	RK3550	Chip R	ERJ2GEJ103X	
R330	RK3546	Chip R	ERJ2GEJ472X	
R331	RK3546	Chip R	ERJ2GEJ472X	
R332	RK3546	Chip R	ERJ2GEJ472X	
R333	RK3546	Chip R	ERJ2GEJ472X	
R334	RK3562	Chip R	ERJ2GEJ104X	
R335	RK3562	Chip R	ERJ2GEJ104X	
R336	RK3562	Chip R	ERJ2GEJ104X	
R337	RK3550	Chip R	ERJ2GEJ103X	
R338	RK3542	Chip R	ERJ2GEJ222X	
R339	RK3550	Chip R	ERJ2GEJ103X	
R340	RK3550	Chip R	ERJ2GEJ103X	
R341	RK3550	Chip R	ERJ2GEJ103X	
R342	RK3538	Chip R	ERJ2GEJ102X	
R343	RK3550	Chip R	ERJ2GEJ103X	
R344	RK3537	Chip R	ERJ2GEJ821X	
R345	RK3558	Chip R	ERJ2GEJ473X	
R346	RK3537	Chip R	ERJ2GEJ821X	
R347	NC			
R348	RK3552	Chip R	ERJ2GEJ153X	
R349	NC			
R350	RK3562	Chip R	ERJ2GEJ104X	
R351	RK3550	Chip R	ERJ2GEJ103X	
R352	NC			
R353	RK3546	Chip R	ERJ2GEJ472X	
R354	RK3550	Chip R	ERJ2GEJ103X	
R355	RK3550	Chip R	ERJ2GEJ103X	
R357	RK3501	Chip R	ERJ2GE0R00X	
R358	NC			
R359	NC			
R360	NC			
R361	NC			
R362	RK3536	Chip R	ERJ2GEJ681X	
R363	RK3558	Chip R	ERJ2GEJ473X	
R364	RK1018	Chip R	ERJ8GEYJ101V	
R365	RK3546	Chip R	ERJ2GEJ472X	

Ref. No.	Parts No.	Description	Parts Name	Version
R366	RK3566	Chip R	ERJ2GEJ224X	
R367	RK3558	Chip R	ERJ2GEJ473X	
R368	RK3548	Chip R	ERJ2GEJ682X	
R369	RK3538	Chip R	ERJ2GEJ102X	
R370	RK3501	Chip R	ERJ2GE0R00X	
R371	RK3546	Chip R	ERJ2GEJ472X	
R372	RK3550	Chip R	ERJ2GEJ103X	
R373	RK3546	Chip R	ERJ2GEJ472X	
R374	RK3562	Chip R	ERJ2GEJ104X	
R375	RK3550	Chip R	ERJ2GEJ103X	
R376	RK3562	Chip R	ERJ2GEJ104X	
R377	RK3562	Chip R	ERJ2GEJ104X	
R378	RK3566	Chip R	ERJ2GEJ224X	
R379	RK3562	Chip R	ERJ2GEJ104X	
R380	RK3566	Chip R	ERJ2GEJ224X	
R381	RK3554	Chip R	ERJ2GEJ223X	
R382	NC			
R384	RK3058	Chip R	MCR03EZHJ473	
R385	NC			T
R385	RK3038	Chip R	MCR03EZHJ102	TA2
R385	RK3059	Chip R	MCR03EZHJ563	TA1
R385	RK3064	Chip R	MCR03EZHJ154	E, EUK
R386	NC			T, E, EUK
R386	RK3038	Chip R	MCR03EZHJ102	TA1, TA2
R387	NC			
R388	RK3550	Chip R	ERJ2GEJ103X	
R392	RK3550	Chip R	ERJ2GEJ103X	
R393	RK3534	Chip R	ERJ2GEJ471X	
R394	RK3530	Chip R	ERJ2GEJ221X	
R395	RK3556	Chip R	ERJ2GEJ333X	
R396	RK3556	Chip R	ERJ2GEJ333X	
R398	RK3566	Chip R	ERJ2GEJ224X	
R401	RK3501	Chip R	ERJ2GE0R00X	
R402	RK3501	Chip R	ERJ2GE0R00X	
R403	RK3570	Chip R	ERJ2GEJ474X	
R404	RK3550	Chip R	ERJ2GEJ103X	
R405	RK3542	Chip R	ERJ2GEJ222X	
R406	RK3546	Chip R	ERJ2GEJ472X	
R407	RK3562	Chip R	ERJ2GEJ104X	
R409	RK3534	Chip R	ERJ2GEJ471X	
R410	RK0107	Chip R	ERJ6GEY0R00V	
SW101	UU0041	Switch	EVQP4203M	
SW102	UU0041	Switch	EVQP4203M	
SW103	UU0041	Switch	EVQP4203M	
TC101	NC			
TH101	XS0052	Thermistor	NTCG104LH104JT1	
VR101	RH0233	Trimmer R	RH02B1C15X	
VR102	RH0233	Trimmer R	RH02B1C15X	
VR103	RH0225	Trimmer R	RH02B1CS3X	
VR104	RH0225	Trimmer R	RH02B1CS3X	
VR105	RH0225	Trimmer R	RH02B1CS3X	
W101	MPCL07AA	Wire	#30P02-070-02	
W102	MACL07AA	Wire	#30A02-070-02	
W103	NC			TA1, TA2
W103	MACLH2GG	Wire	#30AH1-025-H1	T, E, EUK
X101	NC			
X102	XQ0194	Crystal	NT3225SA12.8M	
X103	XK0004	Discriminator	CDBLB450KCAY24-B0	
X104	XQ0184	Crystal	AT49 3.6864M	
	UP0541	PCB	DJ170 INTEGRATED	

Model:DJ-V47

Ref. No.	Parts No.	Description	Parts Name	Version
	FM0265A		HEAT SINK DJ170	
	TS0183	VCO CASE	VCO CASE	
	TZ0049		SILICON DUMPER	

Mechanical Unit

Model:DJ-V47

Ref. No.	Parts No.	Description	Parts Name	Version
	AF0018		XQN2+C4FZ	
	AF0030		XQN2+A6FN(58364-0001	
	AP0039		PH P2+20 FE/3BBC	
	AX0004Z		PT 3P 2X8 BBC AX0004	
	DG0046		LCD LIGHT	
	DP0183		LCD PANNEL DJV47	
	FG0392		WATERPROOF	
	FG0418		LCD RUB CONE	
	FG0419		WATERPROOF RUBBER	
	FG0423		JACK CAP DJ170	
	FG0424		O RING (R COVER)	
	FG0426		MIC RUBBER	
	FP0254		REAR COVER	
	FP0255		ROCK LEVER	
	FP0264		BLIND SEAL	
	NK0081		VOL KNOB	
	SP0013		LECTRA #7800	
	ST0089		LCD HOLDER	
	TL0033		REFLECTIVE SHEET	
	YX0039		LCD TAPE DJS45	

Packing Unit

Model:DJ-V47

Ref. No.	Parts No.	Description	Parts Name	Version
	EA0143	ANTENNA	EA0143	T , E , EUK
	EA0144	ANTENNA	EA0144	T2
	EA0152	ANTENNA	EA0152	T1
	EG0062	BATTERY	EBP-65 P BAG	T1, T2
	EG0065	BATTERY	EBP-65A P BAG	T , E , EUK
	EDC146	ADAPTOR	ADAPTOR 120V	T
	EDC147	ADAPTOR	ADAPTOR 230V	E, T1, T2
	EDC148	ADAPTOR	ADAPTOR 230V (UK)	EUK
	PR0478		SERIAL SEAL	
	DS0446		NITTO MODEL PLATE(S)	
	PR0447		WARNING FCC (N)	T
	PR0452		FCC HOME USE	T
	HU0234		INNER DJ170	
	PS0520B	INSTRUCTION MANUAL	INSTRUCTION DJV17	
	PH0015		WARRANTY CEAT EXPORT	T
	PK0116		CIRCUIT DIAGRAM V47	
	HK0646		INDIVIDUAL BOX V47	
	HP0031		PLA.BAG 5X100X200	
	AA0076		PH M3+6FE/B·ZN	
	BB0009Y	HAND STRAP	HAND STRAP DJS41	
	BH0017	BELT CLIP	BELT CLIP	
	HP0003		PLA.BAG 5X75X110	

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ADJUSTMENTS

1) Required Test Equipment

The following items are required to adjust radio parameters

Test Equipment		DJ-V17	DJ-V47
1. Regulated power supply	Supply voltage	13.8 DC	
	Current	3A or more	
2.Digital multimeter	Voltage range	FS = Approx. 20V	
	Current	10A or more	
	Input resistance	High impedance	
3.Oscilloscope	Measurable frequency	Audio frequency	
4.Audio dummy load	Impedance	8Ω	
	Dissipation	1W or more	
	Jack	3.5mmΦ	
5.SSG	Output frequency	200MHz or more	500MHz or more
	Impedance	50Ω, unbalanced	
	Modulation	FM	
6.Power meter	Measurable frequency	200MHz or more	500MHz or more
	Impedance	50Ω, unbalanced	
	Measuring range	10W or more	
7.Audio voltmeter	Measurable frequency	Up to 100kHz	
	Sensitivity	1mV to 10V	
8.Audio generator	Output frequency	67Hz to 10kHz	
	Output impedance	600Ω, unbalanced	
9.Distortion meter /SINAD meter	Measurable frequency	1kHz	
	Input level	Up to 40dB	
	Distortion	1%-100%	
10.Frequency counter	Measurable frequency	200MHz or more	500MHz or more
	Measurable stability	Approx. ±0.1ppm	
11.Linear detector	Measurable frequency	200MHz or more	500MHz or more
	Characteristics	Flat	
	CN	60dB or more	
12. DC Ammeter	Current	3A or more	

Note:

(1). SSG initial setting

Modulation Frequency:1kHz

Modulation Level:3.5kHz

(2). Necessary optional accessory: EDS-10 (Microphone/SpeakerCable)

(3). Reference sensitivity: 12dB SINAD

(4). Specified audio output level: 500mW at 8Ω

(5). Standard audio output level: 50mW at 8Ω

(6). Use an RF cable (3D2W:1M) for test equipment.

(7). Attach a fuse to the RF test equipment.

(8). All SSG outputs are indicated by EMF

(9). Supply voltage for the transceiver:13.8VDC

2)Preparation:

1. Turn off the power of the adjusting unit (the unit hereafter).
2. Remove the screw ①.
3. Remove the rear cover ②.
4. Remove the wire ③. Keep the wire aside as it will be necessary later. This operation is necessary for the DJ-V17E, DJ-V47E and DJ-V47EUK.
5. Turn on the unit by pressing "F" key and "V/M" key together. The display will be blank out for 2 seconds then comes back normal.

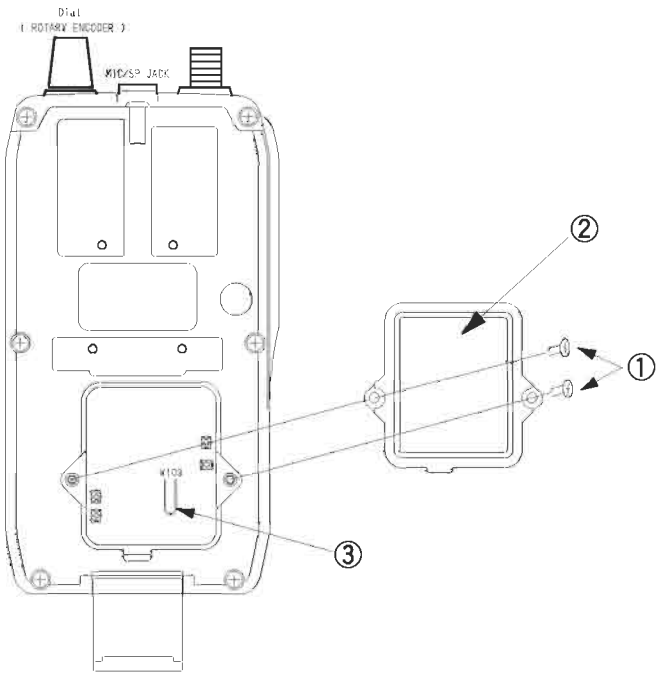


Chart 1 : Removing the rear cover

3) Adjustment mode

The adjustment should be operated in the Adjustment mode. Therefore except for the reference frequency, deviation and tone-deviation adjustments an operator won't touch the components on the board, but most of the adjustments should be done by operating the dial and keys on the unit. During such operation, memory channels are used temporary therefore it is required to program memories before the unit is set to the adjustment mod. Please refer the chart below for the programming channels. The frequencies may be varied within the range of ±0.2MHz depending on the RF environment around your work area, and refer the instruction manual for how to program the memories into the memory-channels.

To enter the adjustment mode, press "F" then "KL" to key-lock the unit. Then press the numeric keys in order of "4", "9", "0", "2", "1" and "7". Observe that decimal points appear on the display below 100MHz and 10MHz digits. To exit from the adjustment mode, repeat the whole sequence (key-lock then enter the code in order). NEVER RESET THE UNIT WHILE OPERATING IN THE SET MODE. This may reset whole adjustment values resulting the malfunction of the unit in the operating mode. The chart below shows the adjustment points and interface between the unit and instruments. Please use an attenuator in case the specifications of the linear-detector and frequency counter may exceed the requirement herein.

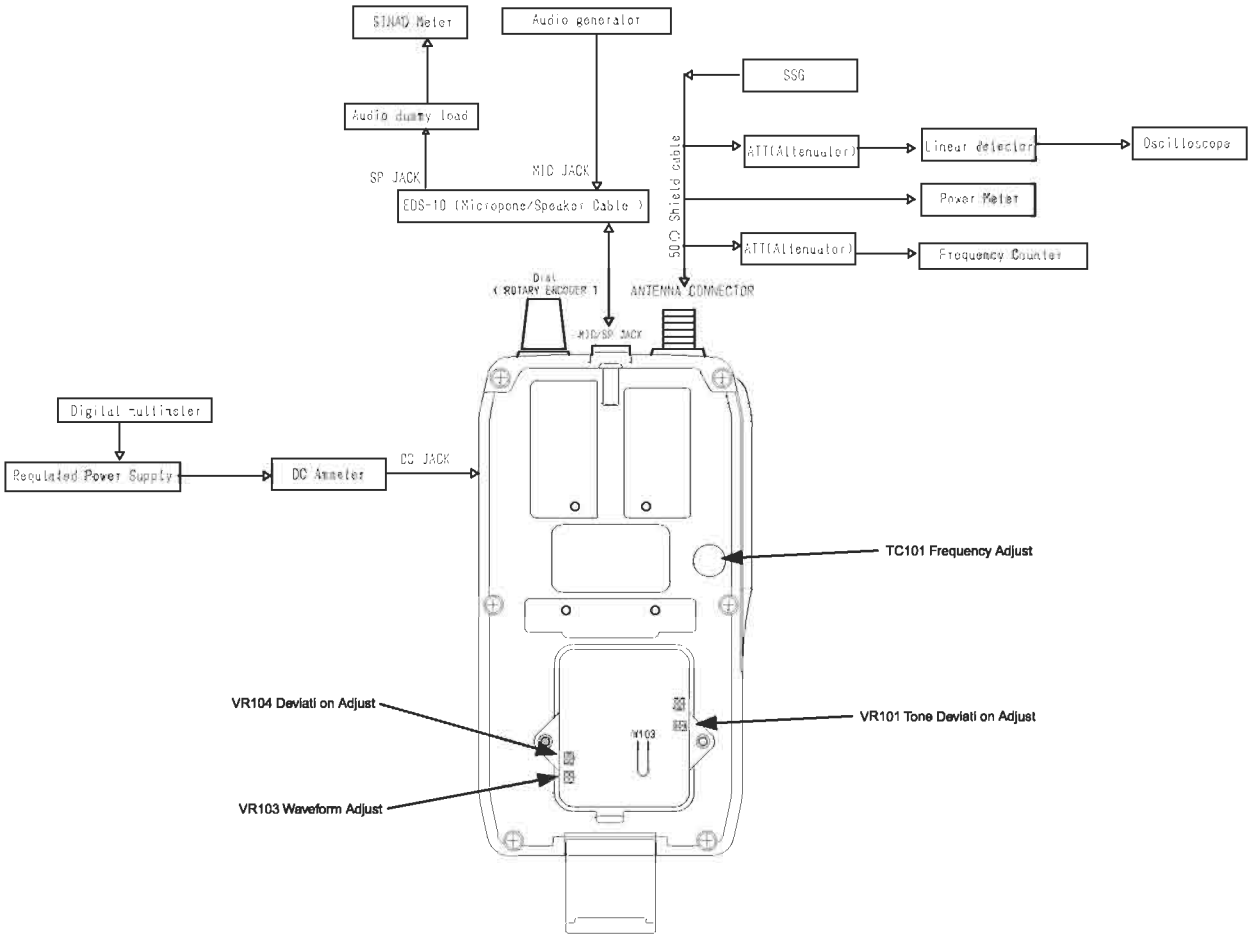


Chart 2 : Adjustment points and interface between the unit and instruments

Table 1: Memory programming for adjustment mode

* Simply memory the frequencies only into the relative memory channels.

Channel	Adjustment menu	Frequency					
		DJ-V17		DJ-V47			
		T, E, EUK	TFH, R	T1	E, EUK	T	T2
1	Frequency Adjustment	145.000	162.000	415.000	435.000	445.000	460.000
2	TX-output / High power	145.000	162.000	415.000	435.000	445.000	460.000
3	TX-output / Low power	145.000	162.000	415.000	435.000	445.000	460.000
4	Microphone deviation	145.000	162.000	415.000	435.000	445.000	460.000
5	Check DTMF tone [1]	145.000	162.000	415.000	435.000	445.000	460.000
6	Check DTMF tone [D]	145.000	162.000	415.000	435.000	445.000	460.000
8	CTCSS tone deviation	145.000	162.000	415.000	435.000	445.000	460.000
10	Check DCS deviation	145.000	162.000	415.000	435.000	445.000	460.000
11	Check Tone-burst tone deviation	145.000	162.000	415.000	435.000	445.000	460.000
12	Secsitivity adjustment (lower edge)	130.000		401.000			
13	Secsitivity adjustment (center of)	145.000	150.000	420.000	435.000	445.000	460.000
14	Secsitivity adjustment (Upper edge)	173.000		459.000	479.000		
15	Secsitivity adjustment (minimum)	145.000	162.000	415.000	435.000	445.000	460.000
16	Secsitivity adjustment (maximum)	145.000	162.000	415.000	435.000	445.000	460.000
17	S-meter adjustment (1)	145.000	162.000	415.000	435.000	445.000	460.000
18	S-meter adjustment (Full)	145.000	162.000	415.000	435.000	445.000	460.000
19	ATT (Attenuator) adjustment	145.000	162.000	415.000	435.000	445.000	460.000
24	Low-battery icon appearance (Li-ion)	145.000	162.000	415.000	435.000	445.000	460.000
25	Low-battery icon appearance	145.000	162.000	415.000	435.000	445.000	460.000

1. Frequency adjustment

Select memory ch.1.

Press PTT on the unit to transmit and measure the TX frequency. Align TC101 to bring the value to the range specified below.

Specification value :

	DJ-V17	DJ-V47
Specification value	±50Hz	

Necessary instrument : Frequency counter

2. TX output - High power

Select memory ch.2.

Press PTT on the unit to transmit. One of digits 10-1F should appear on the display where memory channel number was shown. Rotate the dial on the unit to adjust the TX power to meet the specification. Release the PTT to finish the adjustment. Be sure to check the consuming current value after the adjustment is completed.

Specification :

	DJ-V17	DJ-V47
TX-output power/High	5.0 watts	
Current consumption	1.5A or less	1.8A or less

Necessary instrument : DC Ammeter / Power meter

3. TX output - Low power

Select memory ch.3.

Press PTT on the unit to transmit. One of digits 0-F should appear on the display where memory channel number was shown. Rotate the dial on the unit to adjust the TX power to meet the specification. Release the PTT to finish the adjustment. Be sure to check the consuming current value after the adjustment is completed.

Specification :

	DJ-V17	DJ-V47
TX-output power/Low	0.8 watts	

Necessary instrument : Power meter

4. Microphone deviation

Select memory ch.4.

Input the signal as specified below from an Audio generator and transmit. Measure the deviation value using a Liner-detector. Align VR104 to bring the value to the range specified below.

Specification :

	DJ-V17	DJ-V47
Microphone deviation	4.3±0.1kHz	

Measuring condition :

(1). Audio generator setting

Frequency : 1kHz

Output Level : 50mV

Necessary instrument : Audio generator / Linear detector

Optional accessory required : EDS-10

5. Check DTMF tone [1] deviation

Select memory ch.5.

Press PTT to automatically transmit DTMF tone [1]. Make sure the value is within the specification.

Specification :

	DJ-V17	DJ-V47
DTMF tone [1] deviation	2.4~3.6kHz	

Necessary instrument : Linear detector

6. Check DTMF tone [D] deviation

Select memory ch.6.

Press PTT to automatically transmit DTMF tone [D]. Make sure the value is within the specification.

Specification :

	DJ-V17	DJ-V47
DTMF tone [D] deviation	2.4~3.6kHz	

Necessary instrument : Linear detector

7. CTCSS tone 88.5Hz deviation and adjustment of the sign-wave

Select memory ch.8.

Press PTT to automatically transmit 88.5Hz tone. Measure the deviation value using a Liner-detector. Align VR101 to bring the value to the range specified below. Use an oscilloscope to monitor the sign-wave then correct the wave shape (see the chart 3 below). Use VR103 to correct the wave shape if necessary.

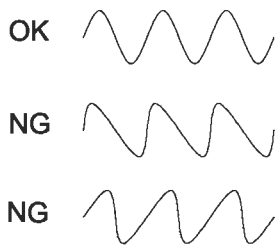


Chart 3: sign-wave correction

Specification :

	MODEL		
	DJ-V17		DJ-V47
	T/E/EUK	TFH/R	
CTCSS tone 88.5Hz deviation	0.80±0.05Hz	0.90±0.05Hz	0.80±0.05Hz

Necessary instrument : Linear detector / Oscilloscope

8. Check DCS deviation (255)

Select memory ch.10.

Press PTT to automatically transmit DCS tone (255). Make sure the value is within the specification using a linear-detector.

Specification :

	DJ-V17	DJ-V47
DCS deviation (255)	0.7~1.2kHz	

Necessary instrument : Linear detector

9. Check Tone-burst tone 1750Hz deviation

Select memory ch.11.

Press PTT to automatically transmit a tone-burst tone 1750Hz. Make sure the value is within the specification using a linear-detector.

Specification :

	DJ-V17	DJ-V47
1750Hz Deviation	2.6~3.4kHz	2.4~3.6kHz

Necessary instrument : Linear detector

10. Receiver sensitivity adjustment

Preparation : Set the speaker audio output level to 50mW.

Operation : There are three points to be adjusted, the lower, central, and upper edges of the receiver's covering range. Set the memory channels accordingly. Input an RF signal from the SSG to the antenna connector then measure output signal at the speaker jack using a SINAD meter. Press "F" (FUNC) key on the unit. One of digits 0-FF should appear on the display where memory channel number was shown. Rotate the dial on the unit to bring the SINAD value to 12dB or better.

a. Lower edge

Condition :

(1). Memory Channel : 12

(2). SSG setting

	MODEL			
	DJ-V17		DJ-V47	
	T/E/EUK	TFH/R	T1	E/EUK/T/T2
Frequency (MHz)	130.000		401.000	
RF Output Level (dB μ)	-6.0	-5.0	-6.0	-3.0
Modulation Frequency (kHz)	1			
Modulation Level (kHz)	3.5			

b. Center of the covering range

Condition :

(1). Memory Channel : 13

(2). SSG setting

	MODEL					
	DJ-V17		DJ-V47			
	T/E/EUK	TFH	T1	E/EUK	T	T2
Frequency (MHz)	145.000	150.000	420.000	435.000	445.000	460.000
RF Output Level (dB μ)	-8.0		-6.0			
Modulation Frequency (kHz)	1					
Modulation Level (kHz)	3.5					

c. Upper edge

(1). Memory Channel:14

(2). SSG setting

	MODEL		
	DJ-V17	DJ-V47	
		T1	E/EUK/T/T2
Frequency (MHz)	173.000	459.000	479.000
RF Output Level (dB μ)	-8.0	-5.0	-6.0
Modulation Frequency (kHz)	1		
Modulation Level (kHz)	3.5		

Necessary instruments : Audio voltmeter / SSG / SINAD Meter / Audio dummy load

Optional accessory required : EDS-10

Note:

Press "FUNC" key or leave the unit for 5 seconds to enter the new values and go to the next adjustment procedure. Memory number should appear on the display when the unit exits the sensitivity adjustment.

11. Squelch adjustments:

Select the memory channel number accordingly to adjust the level Min and Max.
Input an RF signal to the antenna connector from SSG then press FUNC key on the unit. A beep ("pip") sounds and completes the adjustment.

a. Squelch level (Min.)

Condition :
(1). Memory Channel : 15
(2). SSG setting

	MODEL					
	DJ-V17		DJ-V47			
	T/E/EUK	TFH	T1	E/EUK	T	T2
Frequency (MHz)	145.000	162.000	415.000	435.000	445.000	460.000
RF Output Level (dB μ)	-11.0		-10.0			
Modulation Frequency (kHz)	1					
Modulation Level (kHz)	3.5					

b. Squelch level (Max.)

Condition :
(1). Memory Channel : 16
(2). SSG setting

	MODEL					
	DJ-V17		DJ-V47			
	T/E/EUK	TFH	T1	E/EUK	T	T2
Frequency (MHz)	145.000	162.000	415.000	435.000	445.000	460.000
RF Output Level (dB μ)	0					
Modulation Frequency (kHz)	1					
Modulation Level (kHz)	3.5					

Necessary instrument : SSG

12. S-meter adjustments

Select the memory channel number accordingly to adjust the S-meter level 1 and full.
Input an RF signal to the antenna connector from SSG then press FUNC key on the unit. A beep ("pip") sounds and completes the adjustment.

a. S-meter level 1

Condition :
(1). Memory Channel : 17
(2). SSG setting

	MODEL					
	DJ-V17		DJ-V47			
	T/E/EUK	TFH	T1	E/EUK	T	T2
Frequency (MHz)	145.000	162.000	415.000	435.000	445.000	460.000
RF Output Level (dB μ)	0					
Modulation Frequency (kHz)	1					
Modulation Level (kHz)	3.5					

b. S-meter level Full

Condition:

(1). Memory Channel : 18

(2). SSG setting

	MODEL					
	DJ-V17		DJ-V47			
	T/E/EUK	TFH	T1	E/EUK	T	T2
Frequency (MHz)	145.000	162.000	415.000	435.000	445.000	460.000
RF Output Level (dB μ)	20.0					
Modulation Frequency (kHz)	1					
Modulation Level (kHz)	3.5					

Necessary instrument : SSG

13. Attenuator adjustment

Select the memory ch.19.

Input an RF signal to the antenna connector from SSG then press FUNC key on the unit.

One of digits 0-FF should appear on the display where memory channel number was shown. Rotate the dial on the unit to adjust to the point that the S-meter's 3rd segment turns to 4th for DJ-V17, 4th to 5th for the DJ-V47. It is acceptable if the 4th(V17) or 5th(V47) segment blinks at this moment.

Condition:

(1). SSG setting

	MODEL					
	DJ-V17		DJ-V47			
	T/E/EUK	TFH	T1	E/EUK	T	T2
Frequency (MHz)	145.000	162.000	415.000	435.000	445.000	460.000
RF Output Level (dB μ)	20.0					
Modulation Frequency (kHz)	1					
Modulation Level (kHz)	3.5					

Necessary instrument : SSG

Note:

(1) Press “FUNC” key or leave the unit for 5 seconds to go to the next adjustment procedure. Memory number should appear on the display when the unit exits this adjustment point.

(2) The S-meter adjustment should be completed before you perform this operation.

14. Low-battery icon appearance (Li-ion)

Select the memory ch.24.

Press “F” (FUNC) key on the unit. One of digits 0-FF should appear on the display where memory channel number was shown. Rotate the dial on the unit to select “67”. The value can be varied by rotating the dial, but select always 67.

Note:

Press “FUNC” key or leave the unit for 5 seconds to go to the next adjustment procedure.

Memory number should appear on the display when the unit exits this adjustment point.

15. Low-battery icon appearance (Alkaline)

Select the memory ch.25.

Press "F" (FUNC) key on the unit. One of digits 0-FF should appear on the display where memory channel number was shown. Rotate the dial on the unit to select "69" (DJ-V47:"6A"). The value can be varied by rotating the dial, but select always 69 (DJ-V47:6A).

Note:

Press "FUNC" key or leave the unit for 5 seconds to go to the next adjustment procedure.

Memory number should appear on the display when the unit exits this adjustment point.

4) Re-assembly

1. Turn off the unit.
2. In case of DJ-V17E, DJ-V47E and DJ-V47EUK, re-solder the wire ③. This sequence is not required for other versions.
3. According to the instruction below ④, mount the rear-cover ②.
4. Securely screw ① to fix the cover.
5. Turn on the unit by pressing "F" key and "V/M" key together to reset the CPU. The display will be blank out for 2 seconds then comes back normal.

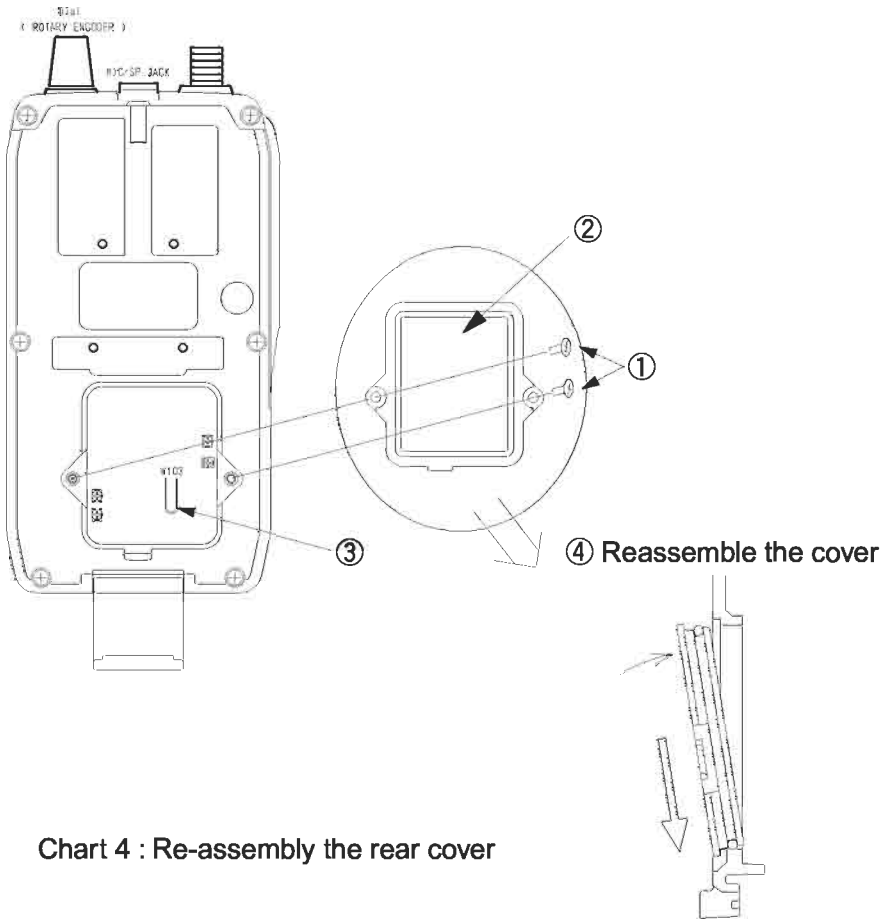
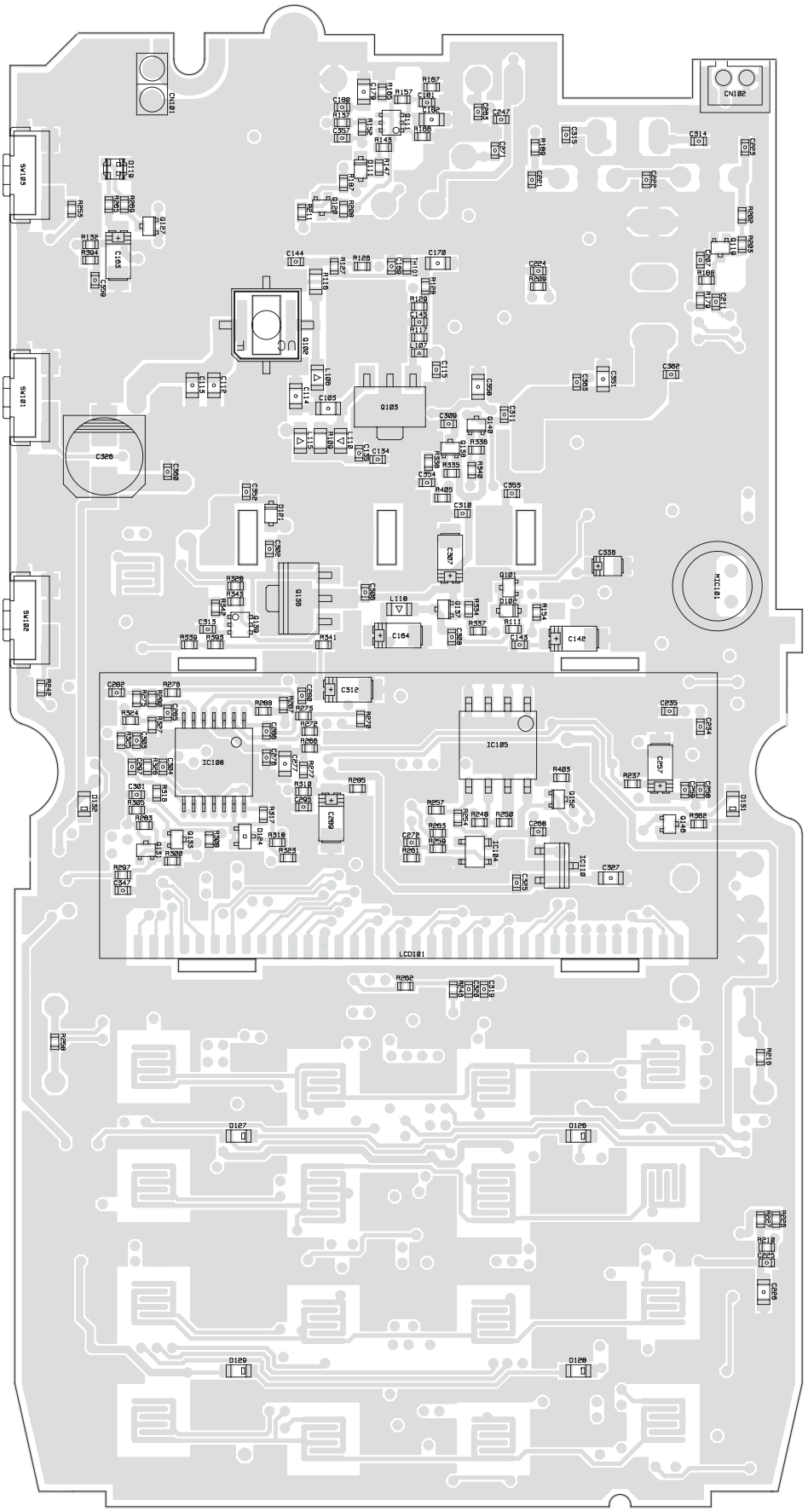


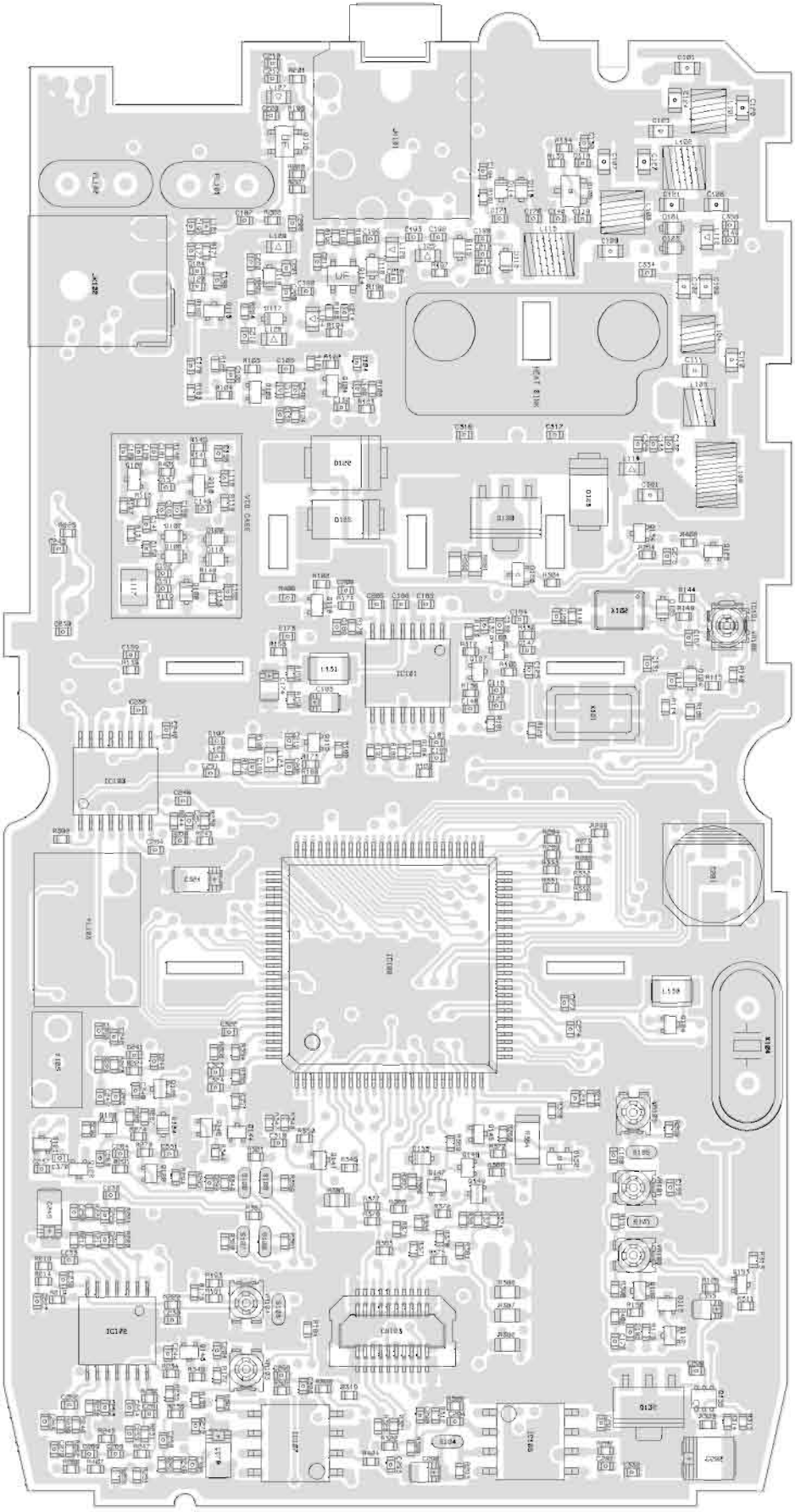
Chart 4 : Re-assembly the rear cover

PC BOARD VIEW

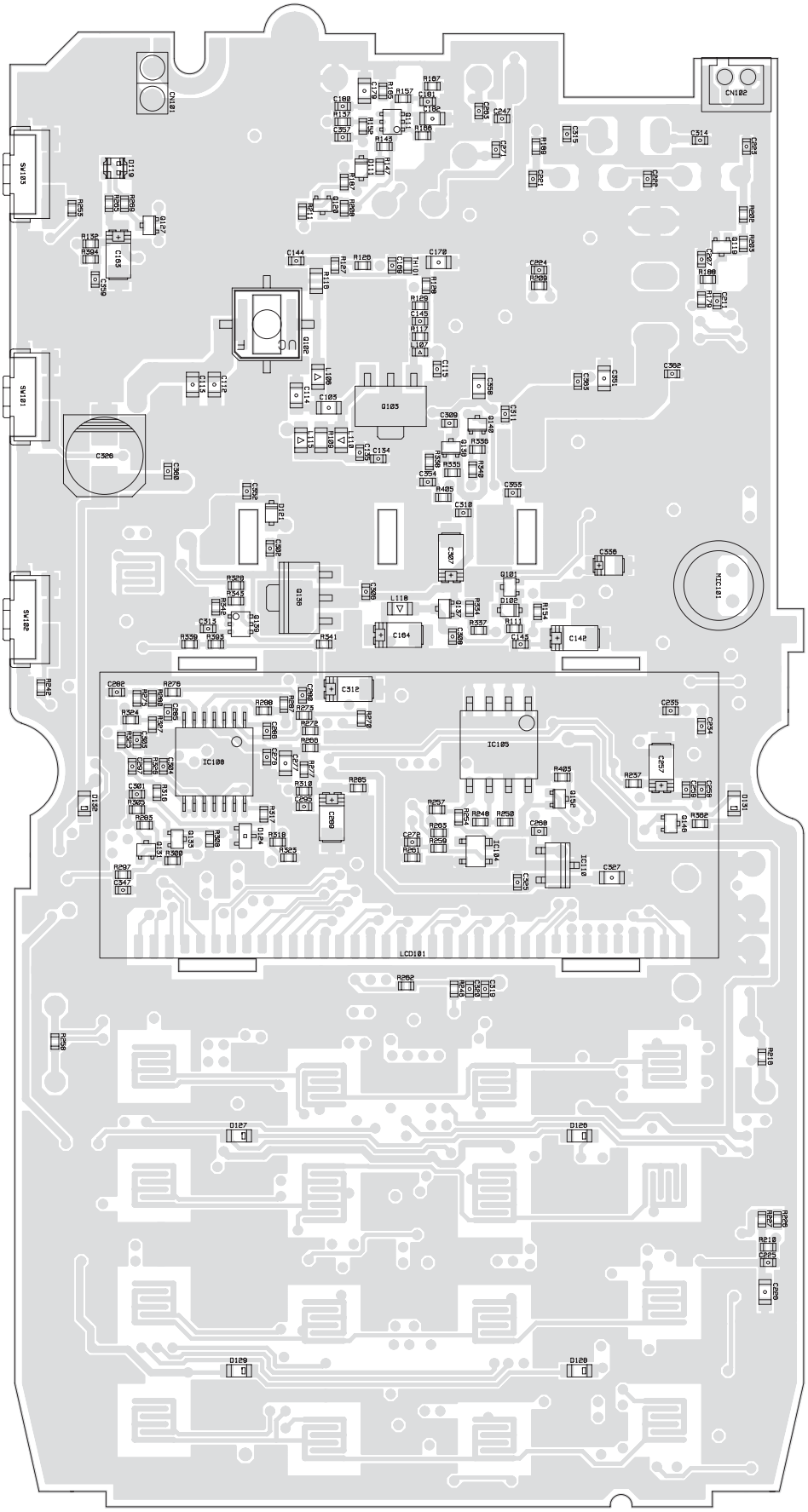
MAIN SIDE A (DJ-V17)



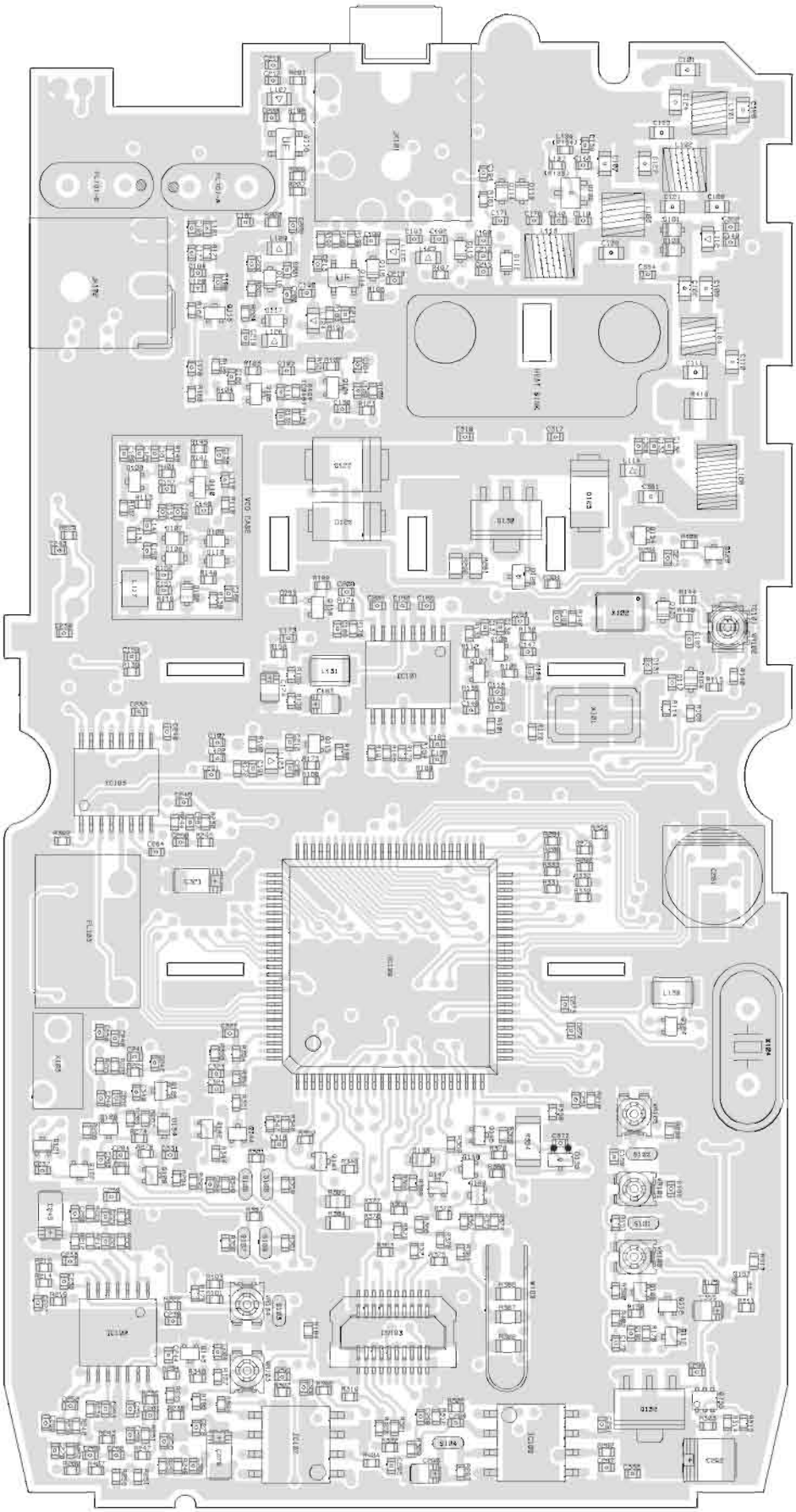
MAIN SIDE B (DJ-V17)



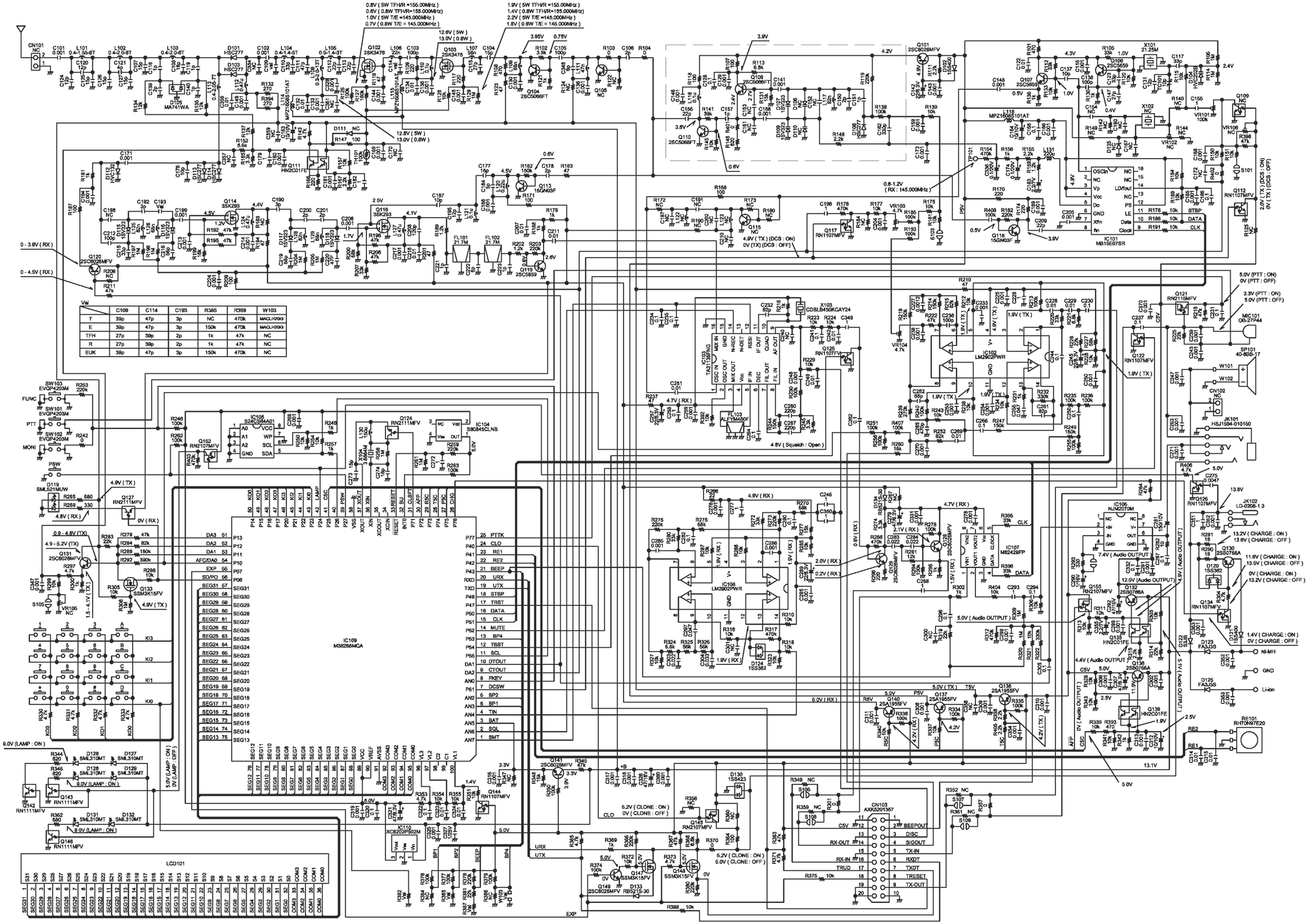
MAIN SIDE A (DJ-V47)



MAIN SIDE B (DJ-V47)

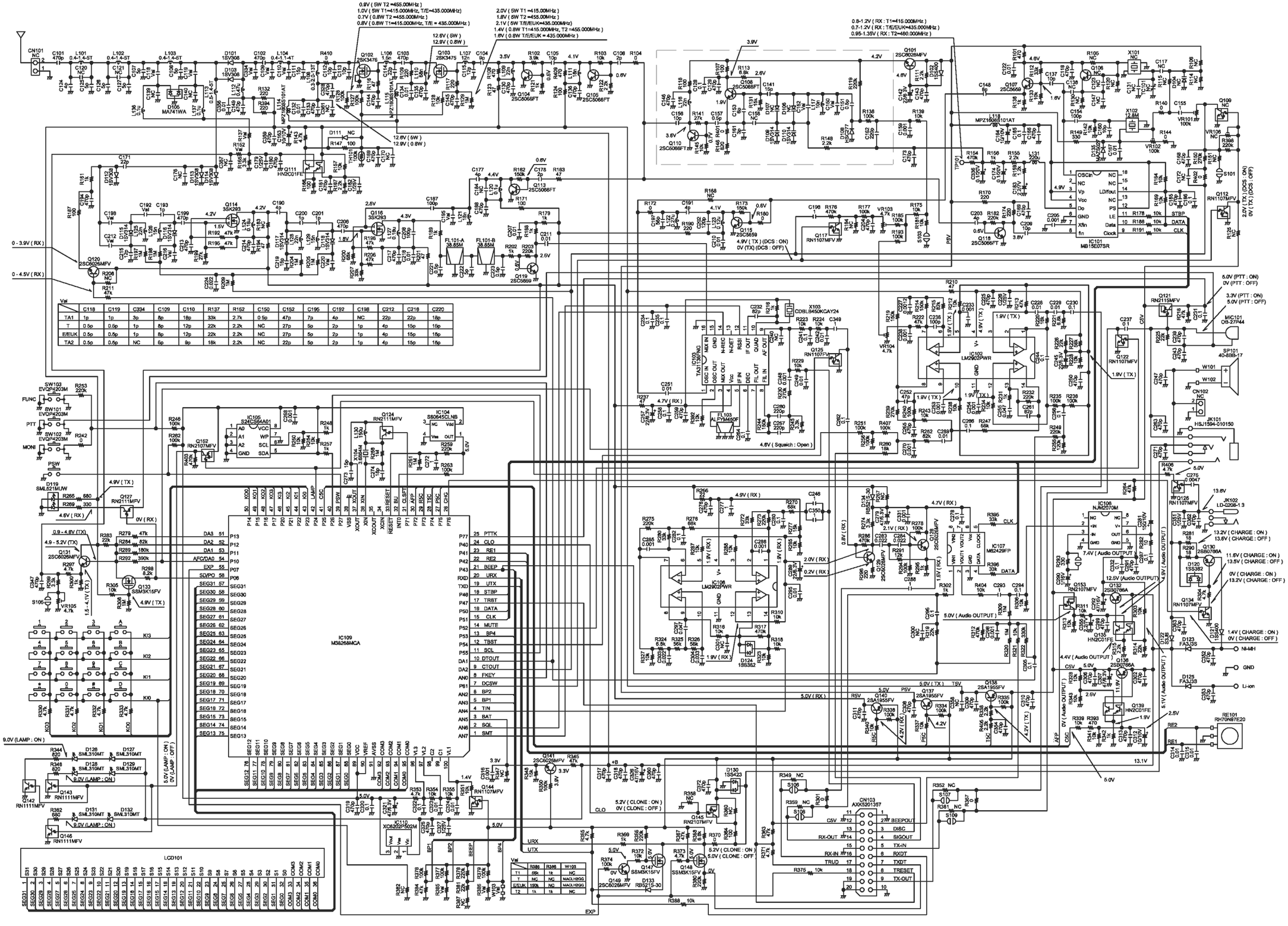


SCHEMATIC DIAGRAM (DJ-V17)

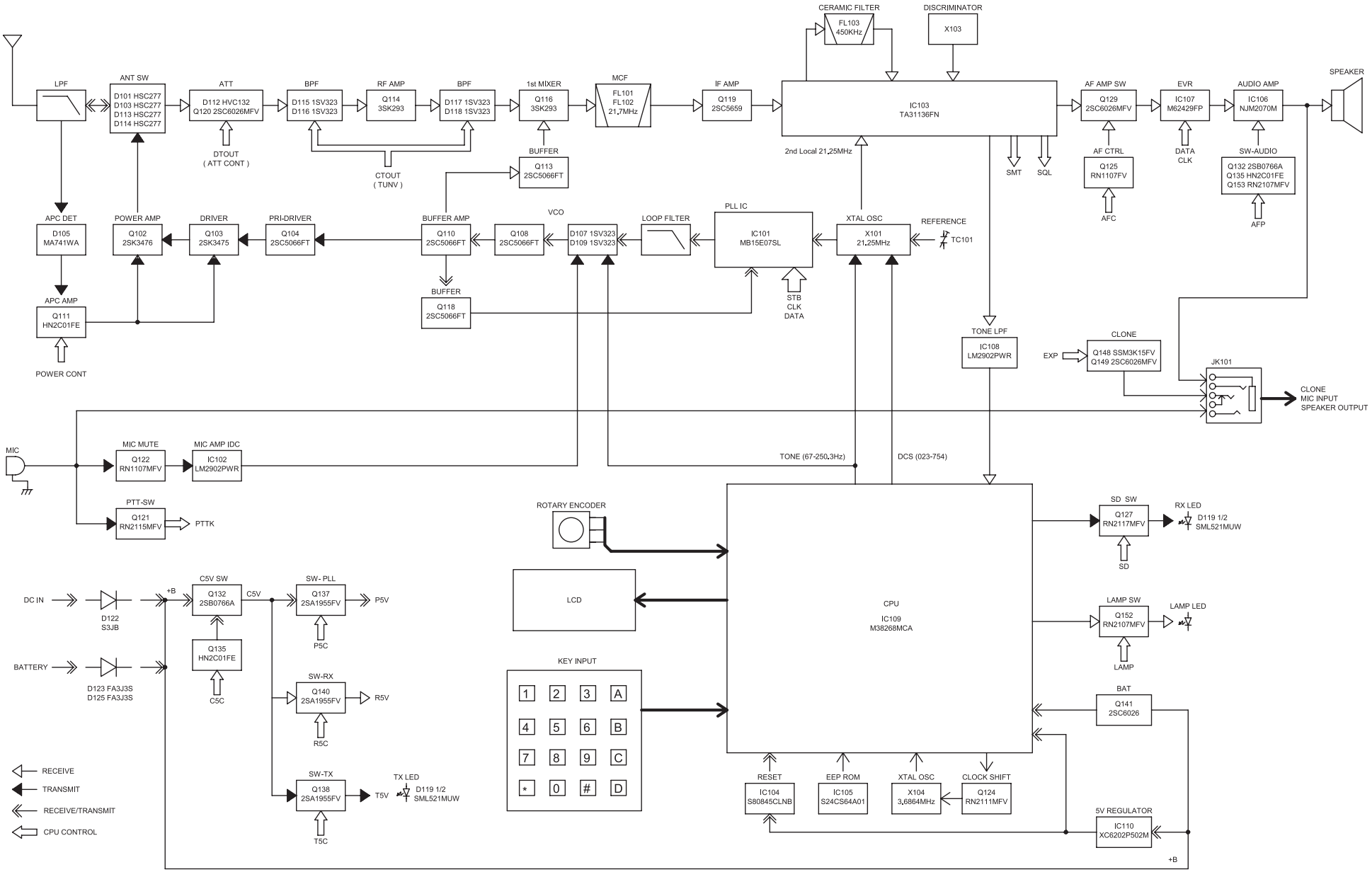


Vai	C109	C114	C193	R365	R398	W103
T	39p	47p	3p	NC	470k	MAGLH2KG
E	39p	47p	3p	150k	470k	MAGLH2KG
TFH	27p	39p	2p	1k	47k	NC
R	27p	39p	2p	1k	47k	NC
EUK	39p	47p	3p	150k	470k	NC

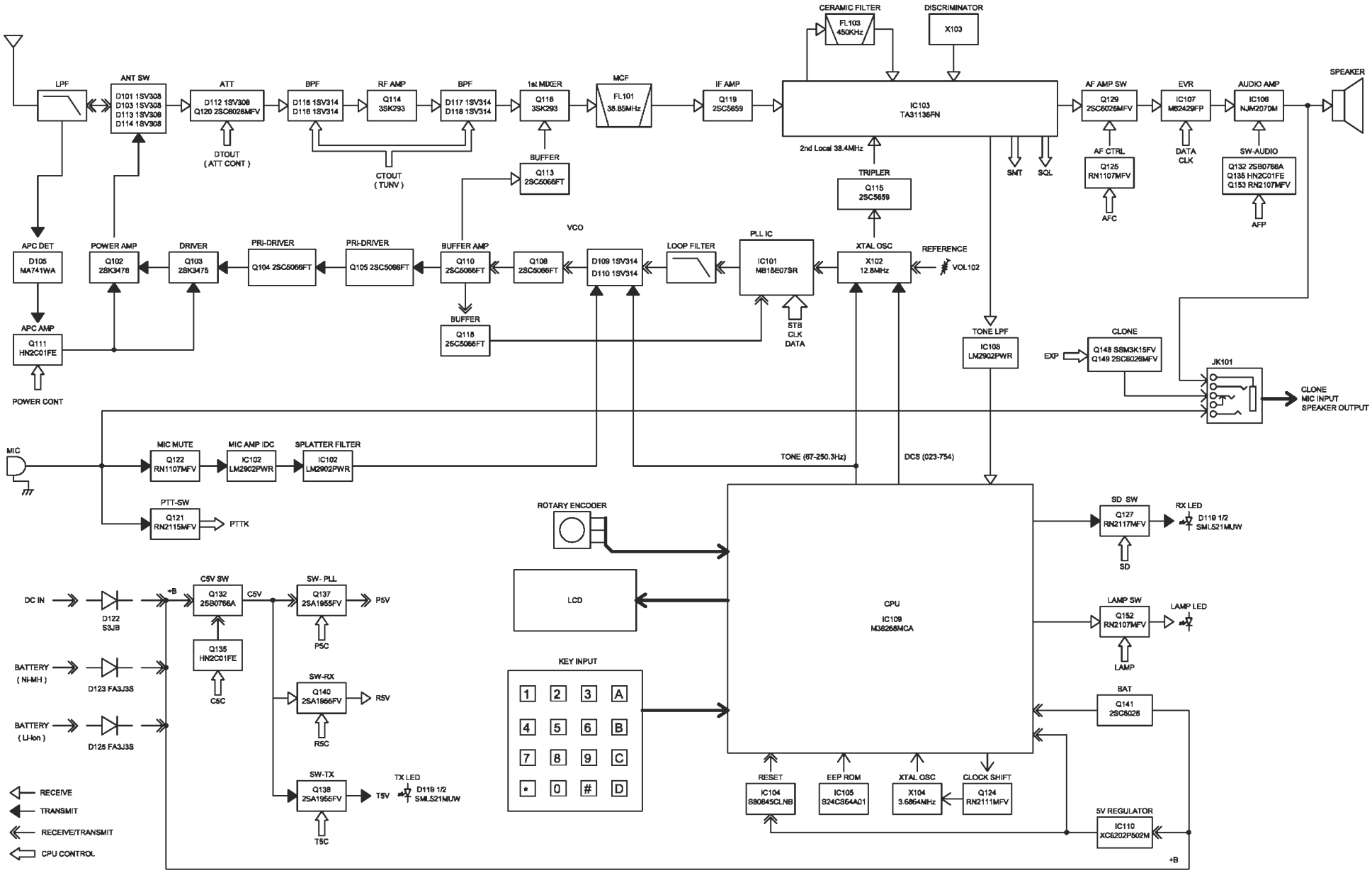
SCHEMATIC DIAGRAM (DJ-V47)



BLOCK DIAGRAM (DJ-V17)



BLOCK DIAGRAM (DJ-V47)



ALINCO, INC.

Head Office: Shin-Dai Building 9th Floor
2-6, 1-Chome, Dojimahama, Kita-ku, Osaka 530-0004, JAPAN
Phone: +81-6-4797-2136 Fax: +81-6-4797-2157
E-mail: export@alinco.co.jp

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